THE OIL WEEKLY

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Oil Man's Calendar

SEPT. 6–10	American Chemical Society, Rochester, New York.
8– 9	West Virginia Oil & Natural Gas Association, Charleston.
15–17	National Petroleum Association, Hotel Traymore, Atlantic City.
16–19	Pacific Oil Show & Black Gold Festival, Taft, California.
24–25	Michigan Petroleum Association, Traverse City.
SEPT. 27 OCT. 1	American Gas Association, Cleveland, Ohio.
OCT. 7–8	American Institute of Mining and Metallurgical Engineers, Petroleum Division, Fall Meeting, Oklahoma City, Oklahoma.
11–15	National Safety Congress & Exposition, Kansas City, Missouri.
11–16	Oil-World Exposition, Houston, Texas.
13–14	Indiana Independent Petroleum Association, Indianapolis, Ind.
14–16	American Association of Petroleum Geologists, Mid-Year Meeting, Pittsburgh, Pennsylvania.
14–16	Independent Petroleum Association of America, Houston, Texas.
18–22	American Welding Society, Atlantic City, New Jersey.
18–23	American Institute of Mining & Metallurgical Engineers, Atlantic City, New Jersey.
29–30	Mid-Continent Oil and Gas Association, Texas Division, Dallas, Texas.
NOV. 8–12	American Petroleum Institute, (Annual), Chicago, Illinois.
1938 MAR. 16–18	Annual Meeting, American Association of Petroleum Geologists, Roosevelt Hotel, New Orleans, La.

Contents « August 30, 1937

Volume 86, Number 12

The Changing Panorama.....25 to 26

General News.....27 to 32

- Production Allowables..... 27
- Oil in the Courts..... 28
- Labor Situation..... 29
- Proration Matters..... 30
- Legislative Affairs..... 30
- Going Deeper for Oil This Year..... 31
  BY L. J. LOGAN
- Men in the Industry's News.....147 to 148
- Squeaks from the Bull Wheel..... 201

South Texas Number Features.....33 to 145

- Banner Year in Developments Boost South Texas' National Importance..... 34
  BY EARL S. POST AND WARREN L. BAKER
- Rapid Production and Drilling Engineering Progress Raising the Value of South Texas..... 44
  BY EARL S. POST
- South Texas Oil Outlet Facilities Enlarged..... 56
  BY EARL S. POST
- South Texas Drilling Depths Are Increasing..... 62
  BY EARL S. POST
- Index to Tabulated History of South Texas Fields..... 67

Markets and Statistics.....151 to 156

World Developments.....140 to 144

Pipe Line News..... 156

Index to Field Developments..... 160

New Equipment and Manufacturers News.....197 to 200

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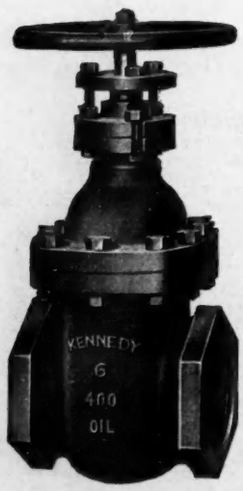

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LOOKING AHEAD

WITH THE EDITOR

Study of Bradford Flooding Practices . . .

Gulf Coast Future Appears Bright.

Care of Centrifugal Pumps . . .

MID-CONTINENT operators commencing the flooding of properties can procure much value from a review of the basic operations employed in the Bradford district, which has been the water flooding proving ground of the world. The second installment of a series of three articles describing the practices that have been successful at Bradford will appear next week, and will discuss drilling and producing phases. The importance of careful core analysis will be the feature of this article, and is one that should not be overlooked by anyone contemplating water flood projects.

THE rapid advancement of the Texas-Louisiana Gulf Coast region to a position of great national importance has been one of the outstanding developments of recent years. Yet the future of the territory is just as bright today as a few years ago. In other words, the discoveries of the past few years have by no means resulted in the finding of the larger portion of its possibilities. It is only logical, in view of its natural potentialities to assume that important new fields will appear in the future in generous numbers, declares Brad Mills in an interesting article next week.

CLOSE inspection to prevent the setting up of forces that may quickly wreck such high-speed machines as centrifugal pumps is the most important item in their care. Records of 40 consecutive pump examinations show only one case of impeller wear at the joint between rings, 17 impellers were discarded for channelling, chafing and other defects, while in the other 22 cases the wear was localized in the rings. Therefore, the clearance between shaft and impeller rings must be checked frequently, and promptly replaced if wear is excessive. The care of centrifugal pumps is the subject of the fourteenth article in our "Equipment Care Series."

The changing panorama

this week

THE almanac says there will not be any oil flood during September. The streams of crude oil that flow in Texas, Louisiana, Kansas, Michigan and Oklahoma will stay within banks, and those in California and New Mexico are expected to remain around recent levels.

September Control to Be Strict

The oil conservation officials in most of those leading oil producing states last week showed a determination to hold crude production within market demand in September, when they prepared proration schedules for the month.

Sticking close to the estimates of demand by the Bureau of Mines, the state officials have prescribed quotas that promise to hold output in close conformity with the market requirements.

This outlook contrasts favorably with the less satisfactory control situation that has prevailed under the comparatively large allowables of August.

Too much oil has been produced in August, and the excess has caused additions to crude stocks.

Market Stabilization Needed

The tightening of the restraints on crude production comes, apparently, at the nick of time.

The markets for both crude and refined oils lately have shown perceptibly the ill effects of the lax control of August, and a stabilizing influence is needed.

Added to the recent reduction of crude prices in Michigan was that more recently made by one company on lighter oils of the Texas-Louisiana Gulf Coast. Meanwhile, there has arisen another sign of too much crude production: prorating of purchases in a Kansas county, and the announcement of plans for prorating purchases in a North Louisiana field.

Tank car prices of gasoline and other refined oils at refineries have held unchanged in recent weeks. But retail gasoline price-cutting has developed in widely scattered sections of the country.

The whole market outlook now is more hopeful, however, in view of the prospects for close balancing of crude production with demand during September.

Inventory Situation Good

Making current supply balance with current demand is the chief problem that the industry must deal with, in striving toward an ideal economic situation. For little fault can be found with the inventory position that the industry occupies.

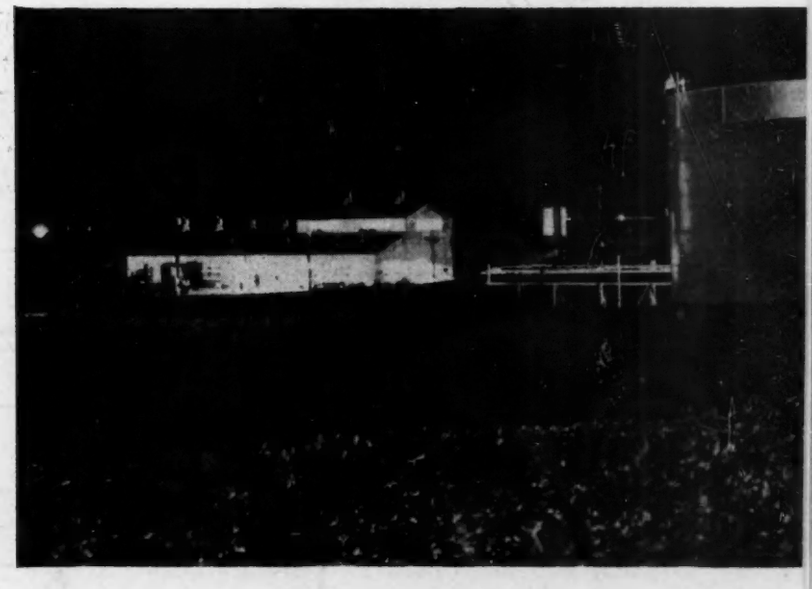
Crude oil stocks in the United States August 14 totaled 308,737,000 barrels, or only about 4,000,000 barrels more than on the corresponding date last year. While the crude inventories show only that slight increase over a year ago, the demand for petroleum has been running about 11 percent higher this year than last year.

Gasoline stocks of the country on August 21 totaled 67,360,000 barrels, or about 9 percent more than a year ago. Such an increase over the inventories of a year ago is justified, since gasoline demand has been running this year around 10 percent higher than last year.

Trust Busting Planned

Anti-trust prosecutions brought by the Government against the oil industry will be pushed through to decision rather than settled by consent decrees if the Department of Justice adopts the recommendations of Representative John M. Coffee of Washington.

The consent decree permits evasion, in Coffee's



• **LOOMING BRIGHT** on the United States oil horizon, like this pipe line station out of the darkness of night, is Southwest Texas. No district in the nation is experiencing as much drilling, as many new discoveries, or a faster increase in daily production. The scene was taken near the Saxet field, one of the important newer fields near Corpus Christi. The flare to the extreme left is nearly 20 miles away.

view; a few convictions would have a salutary effect.

Legislation stiffening the anti-monopoly laws will be asked of Congress in January by the department, as a prelude to a general trust-busting campaign in a half-dozen industries. including oil.

Congress to Lose Pettengill

Announcement last week by Representative Samuel B. Pettengill of Indiana that he will not be a candidate for re-election next year will remove from Congress a prominent member of a rapidly increasing group of solons who do not believe that the federal government should try to run big businesses from Washington.

As a member of the Cole subcommittee which investigated the oil industry some two years ago, Pettengill gathered much first-hand information regarding the oil situation, which he put into his book, "Hot Oil."

Apparently displeased with efforts of the administration to take over the Supreme Court as an adjunct to the White House and to extend federal control over industry, Pettengill will retire to the practice of law. But he will serve through next session, which is expected to bring a show-down between the President and Congress as to whether the latter shall remain a "rubber stamp."

Not so much is being heard currently about organizing efforts of the labor unions in the oil industry, but increasingly more is being heard about activities of the labor groups, particularly those marching under the banner of John L. Lewis.

The period of organization work is passing, and the workers are getting down to business. Organized for bargaining, they are beginning to bargain. The C.I.O.-banded employees of one large oil company operating in Oklahoma are preparing, for example, to demand increased pay and shorter working weeks when a new contract is made soon upon expiration of the present contract.

Some of the independent oil workers' unions, too already have been negotiating for more liberal concessions to employees.

Meanwhile, labor groups are not only approaching managements of companies with demands regarding wages, hours, and working conditions, but also are, in some instances, attacking the managements with the new weapon acquired through the Wagner act. Invoking the help of the National Labor Relations Board, the labor unions, particularly those bearing the C.I.O. label, are filing complaints against oil companies for alleged interference with the rights of the workers to be active in unions. The unions also are pushing, through the N.L.R.B., demands for reinstatement of employees alleged to have been discharged because of union activities.

Many New Fields Found

Oklahoma, West Texas, Michigan, and Kansas shared honors in field and wildcat developments of the week.

There were two new fields in Oklahoma: Tillman and Stephens, the latter looks important. Grant prospect looks disappointing.

Kansas crude reserves were bolstered by discovery of two fields in Stafford County and the extension of others.

Buckeye field in Michigan was extended seven miles southeast by an independent's discovery of commercial production in Dundee lime at 3497 feet, an event which will bring three majors into the play.

As to West Texas, a northwestern Dawson County wildcat, 4½ miles west of the county's lone producer, is showing for a small well and is probably on the same structure. A Yoakum County wildcat, eight miles west by north of production, flowed steadily after using acid at 5255 feet. A one-well pool in southwestern Hockley County is assured of a two-mile extension. Bad news with the good—the prospective 1½-mile southeast extension for the Ordovician zone in Sand Hills field yielded mostly water on a swabbing test, despite the high structural position.

Inside completions in East Texas fields are running about six wells per day.

The discovery well of prolific Robinson field, Fisher County, Central West Texas, and the 1072-acre block on which the well is located have been bought by a Tulsa independent.

Louisiana Gulf Coast field activities were featured by discovery of a new gas field on the China prospect in Jefferson Davis Parish and by the setting of a new world's record for 7⅝-inch casing by Continental Oil Company in Vermilion Parish.

Market briefs

Outlook—Prospect of better crude control in September encouraging.

Crude Market—Stable, despite excessive production lately.

Refined Oil Markets—Prices holding at previous levels.

CURRENT OPERATIONS

Week Ended	Daily Crude Production	Daily Crude Runs to Stills
August 21, 1937	*3,729,350	3,415,000
Previous week	3,718,600	3,340,000
Year ago	3,069,600	2,975,000

CRUDE STOCKS

Date	Crude Oil (Barrels)
August 14	308,737,000
Week ago	307,922,000
Year ago	304,938,000

REFINED OIL STOCKS

Date	Gasoline (Barrels)	Gas & Fuel Oil (Barrels)
August 21	67,260,000	110,493,000
Week ago	69,087,000	109,664,000
Year ago	61,071,000	110,628,000

DRILLING

Period	Wells Completed
Past week	541
Previous week	592
Year ago	481
Year Total	
This year	18,914
Last year	15,900

*All time peak.

South Texas Featured

If championship pennants were awarded by the oil industry, Southwest Texas would be the strongest contender for the United States crown at this stage of the 1937 contest. This district is leading all other regions (most of which are complete states) in volume of activity, in rates of discovery and in production increase. So fast has been the growth of South Texas the past few years that it is rapidly assuming greater national importance.

The achievement of the territory is shown by the following figures: a 57 percent increase in crude production in contrast with a 20 percent gain by the nation; a growth of 147 percent in crude reserves compared with a 7.3 percent rise in the country; a 17 percent raise in completions; and the discovery of 55 new fields the first half of the year, which is equal to the combined total of the next three regions.

It is fitting that any single region achieving such marked progress should be the subject of an issue of The Oil Weekly. Consequently, we publish herewith our "South Texas Number."

A large portion of the book is devoted to a factual tabulated history of every field, giving its location, discovery data, geological structure, producing formations, producing area, extent of development, deepest test, principal leaseholders, reserve data, oil outlets, gravity, etc. This information starts on page 67.

A number of feature articles precede the above section. These trace the rapid development of Southwest Texas, and describe operating problems and practices.

Last, but not least by any means, is the most unique district map ever published by a trade journal in the oil field. It is so printed that at a glance the formations from whence each field produces may be determined.

Production Allowables

States fix September production allowables below August levels . . . Texas cuts 110,000 barrels . . . Oklahoma and Kansas go below Bureau quota . . . Small increase for Louisiana . . . Michigan output also to be lower.

IT BECAME definite last week that United State's crude production in September will be much closer to actual consumption than in August, when several states issued allowable orders for the coming month. Three of the major producing states established allowables below the preceding month's quota. Two of these even cut below the Bureau of Mines estimate of consumption, which probably was the most significant development. Still a fourth state, which also produces a goodly portion of the nation's current output, fixed its output only slightly above August. It also developed that a production decline could be expected in still another state.

These developments are very important, in view of August production exceeding actual consumption by such a wide margin as to make markets shakey.

In so far as the amount of oil cut off the market was concerned, Texas led the way. In fixing an allowable of 1,441,734 barrels daily, this state cut 110,000 barrels from its allowable of August 18. Despite this drastic curtailment, however, the state is still above its Bureau of Mines quota by 28,134 barrels.

However, the most important action was taken in Oklahoma. By slashing its output 33,400 barrels daily from its August allowable, this state dropped 33,600 barrels below the figure the Bureau of Mines had recommended.

While Kansas fixed its allowable exactly at the Bureau of Mines figure of 200,900 barrels per day, it will require producers to make up for over-producing 4650 barrels daily last month. Consequently, Kansas' net allowable is a reduction of 4250 barrels, and is 4650 barrels under the Bureau of Mines.

Louisiana continued to exceed the Bureau of Mines quota. Whereas the Bureau of Mines had recommended a reduction of 6000 barrels, the state increased its allowable 945 barrels. Thus, it is 17,395 barrels over the bureau's figure.

It became apparent last week also that Michigan's production would drop from its all-time peak of August. The per well allowable of the Buckeye field, which produces half the oil in the state, was cut to 75 barrels. It has been producing approximately 90 barrels to the well daily. This means a cut of about 4000 barrels per day.

California set its September allowable at 638,200 barrels, the same as its bureau quota, and an increase over August of 25,000 barrels.

Therefore, it is to be seen that production in September will be approximately 125,000 barrels below the average in August.

Oklahoma cuts allowable

The Oklahoma Corporation Commission August 27 set the state's September crude production allowable at 600,000 barrels daily. This figure is 33,600 barrels less than the United States Bureau of Mines had estimated as the demand market for the state, and followed recommendations of purchasers as voiced by William J. Armstrong, state conservation officer. The action was fully expected, but nevertheless represented an important step toward the balancing of the nation's September crude supply with consumption.

Oklahoma, thus, will be 33,400 barrels under its August allowable in September. Although this cut was not as large as that made in Texas, it was held to be unusually significant because of placing the state's output below the Bureau of Mines, while Texas continues to exceed latter's recommendation.

Kansas reduces

The Kansas State Corporation Commission followed the Bureau of Mines recommendation in establishing a daily crude production allowable for September of 200,900 barrels. However, the order stipulated that operators were to make up an average of 4650 barrels daily that occurred in July. Therefore, the net September allowable of the state is 196,250 barrels, which represents a reduction of 4250 barrels from July, and is 4650 barrels below the Bureau of Mines market forecast.

The action somewhat disregarded the indicated desire, expressed by some major purchasers, of cutting back the output of the state. At a previous hearing, six major firms asserted the desire for a September reduction of not less than 12,000 barrels daily, six other firms favored little or no change in daily runs, and five smaller purchasers wanted to see runs hiked. Those who represented firms asking for reductions explained it was necessary because of decreased demand for processed oils, and by reason of recent increases in storage.

Texas September Allowable

In an order issued by the Texas Railroad Commission last week the total Texas allowable was cut 110,000 barrels daily, effective September 1. This resulted in a total allowable for Texas of 1,441,734 barrels per day.

This reduction represented a cut of 23 percent of the proratable oil in each of the flush fields of the state outside of East Texas. The proratable oil is determined by subtracting the marginal allowance from each well. Twenty-three percent of the remainder was cut from the well allowables.

Since the Railroad Commission heard testimony at the hearing from its own engineer recommending a cut for East Texas, some observers were surprised that no reduction was ordered. Although Commissioner C. V. Terrell declined to comment, Commissioner Ernest Thompson explained the situation.

"We have held the hearing and taken evidence that showed that pressure decline was excessive last month and that the rate of decline has been accelerated for the past two months. In other words, we have diagnosed the case and found that the patient is ill. If a man gets the belly-ache, he may not want the doctor to operate, but if it gets worse, he might change his mind."

It appeared from this explanation that the commission planned to do nothing at once, in the hope that the operators themselves would ask for a cut. A careful study of the field has been made by the commission engineers, and they have determined that to cut the rate of flow in East Texas to a point that will prevent excessive pressure decline requires a minimum allowance of 18 barrels per well and a

Comparison of Recent Texas Allowables

DISTRICT	ALLOWABLE			
	July 1	August 1	August 18	September 1
1. Southwest Texas	27,456	29,105	30,079	29,043
2. Southwest Texas	53,620	62,494	65,317	56,659
3. Gulf Coast	193,291	222,449	230,016	202,749
4. Southwest Texas	140,897	155,227	177,499	159,832
5. East Central	43,328	44,462	44,893	38,558
6. East Central	39,273	42,662	85,125	39,759
Rodessa	36,048	37,718		32,617
East Texas	466,000	470,734	473,765	475,308
7. West Central	46,010	48,899	50,578	48,821
7C. West Central	21,838	22,403	23,043	22,448
8. West Texas	177,040	213,498	224,100	193,460
9. North Texas	61,675	64,440	66,363	64,250
10. Panhandle	79,000	81,400	82,936	78,230
Totals	1,385,476	1,495,491	1,551,734	1,441,735

maximum allowance of 23 barrels for the best producers in the field.

In a prepared statement explaining the reduction, Commissioner Terrell pointed out that with the end of the summer marketing season, gasoline consumption drops, especially in the North and East, where 84 percent of the products from Texas crude is consumed. Thus it was necessary to order a reduction now since September production would not be processed and reach the filling station until some two months later.

The total Texas allowable on August 18 was 1,551,734 barrels per day. It was from this allowable that the commission subtracted 110,000 barrels. The Bureau of Mines estimated that the consumer demand for Texas crude during the month of September would be 1,413,600 barrels daily. Thus the commission's order permits the production of 28,134 barrels more than Bureau estimated would be needed.

Texas Field Allowables

New Hull was the only field increased between August 18 and September 1. This increase, which amounted to 554 barrels, was made after a special investigation found wells would produce more efficiently at a higher rate.

Listed below are the allowables of September 1 and the amount of reduction by fields that amounted to more than 300 barrels:

Field—	Allowable September 1	Allowable Reduction
Dirks	3,399	474
Greta	11,911	2,231
Placedo	8,596	702
Tom O'Connor	14,480	2,858
Refugio New	3,972	838
Aransas	2,845	488
Corpus Christi	7,253	1,146
Flour Bluff	5,790	1,110
Gov't Wells—North	11,049	666
Gov't Wells—South	5,709	306
Loma Novia	19,584	1,244
Lopez	9,654	684
O'Hern	6,200	550
Plymouth	11,644	2,540
Sam Fordyce	5,487	417
Seven Sisters	11,061	786
Saxet New Shallow	10,990	1,219
Saxet New Frio	16,930	3,069
Taft	3,327	550
Amelia	4,036	577
Anahuac	11,372	1,617
Bay City	1,934	366
Barbers Hill	13,155	500
Conroe	43,279	5,903
Dickinson	2,943	410
Goose Creek	2,299	309
Kermit	19,822	1,948
Keystone	3,174	576
Masterson	900	375
Means	2,248	373
Penwell	5,090	634
Ward North	7,359	991
Ward South	19,793	5,359
Yates	28,406	6,876
Jack (South Half)	10,754	848
Jones	7,608	346
Upton (McCamey)	12,749	500
Young (South Half)	6,300	325
High Island	3,132	551
Hastings	18,111	2,999
Hull Old	2,859	362
Manvel Miocene	4,464	785
Manvel Oligocene	4,173	731
Pierce Junction	3,126	468
Raccoon Bend Cockfield	3,143	304
Segno	1,836	414
South Houston	4,663	755
Sugarland	3,113	619
Thompson	12,945	2,352
Tomball	8,316	494
West Columbia	1,837	360
Cayuga	7,886	1,034
Rodessa	32,617	6,756
Sulphur Bluff	4,648	952
Talco	28,263	4,677
Van	28,734	5,376
Cowden North	7,800	1,195
Estes	9,997	1,887
Foster	2,630	439
Goldsmith	11,936	2,033
Gulf McElroy	3,876	799
Henderson	3,775	615
Howard Glasscock	15,052	1,299
Iatan East Howard	6,730	797

Louisiana exceeds Bureau

Louisiana's daily average oil allowable for September has been set at 265,495 barrels, which represents an increase of 945 barrels per day over the August order, and compares with a United States Bureau of Mines recommendation of 247,900 barrels.

South Louisiana's allowable was boosted 195 barrels to 180,245 barrels. North Louisiana's allowable was increased 750 barrels to 85,250 barrels, all the increase going to the Lisbon field of Claiborne and Lincoln parishes. The Louisiana side of Rodessa was left unchanged at 50,000 barrels.

While the daily field allowable for the Lisbon field was placed at 12,750 barrels in the allowable order, the augmented daily field allowable was set at 13,200 barrels. The latter allocation on acreage being 9900 barrels, and that on bottom-hole pressure being 3300 barrels, on a 75-25 percent basis.

The area allotted to oil was 1632.3 acres, and the acreage factor was 1 acre equals 6.06506 barrels. Total bottom-hole pressures for the field were 106,965 pounds, the bottom-hole pressure factor being 1 pound equals .03085 barrels.

The daily field allowable for the 8000-foot lower Marine (Bodcaw sand) horizon of the Cotton Valley field, Webster Parish, North Louisiana, was placed at 35,000,000 cubic feet of gas daily for September. This is the same figure as recently given the area in a temporary allowable order.

Of the 35,000,000-foot gas allowable, allocation on an acreage basis was 26,250,000 cubic feet, and the allocation on bottom-hole pressure was 8,750,000 feet. Acreage allowed to producing wells was 920 acres, or an acreage factor of 28,532.6 cubic feet per acre. Total bottom-hole pressures were 57,000 pounds. Fifteen wells are making about 3000 barrels of distillate daily.

Buckeye Allowable Reduced

The Buckeye Proration Committee August 26 voted a 75-barrel flat allowable for wells in the Buckeye field effective September 1. This will give the pool, Michigan's most important producing area today, a total allowable of approximately 15,000 barrels daily at the present time. The committee gave the field a 100,000-barrel potential rating. Pipe line outlet facilities have a capacity for from 18,000 to 21,000 barrels daily. The reduction in the field's allowable is expected, at least temporarily, to effect some relief for the state's congested market condition. During July and August, the per well allowable at Buckeye was 150 barrels, although runs actually averaged under 90 barrels per well because of the lack of transportation facilities.

Oil in the Courts

Government preparing ambitious anti-trust campaign and apparently will abandon all compromises.

IT appeared more definite last week that the oil industry could expect additional anti-trust suits to be filed by the federal government. An ambitious anti-trust campaign is planned by the Department of Justice in the courts, and apparently it will abandon the previously applied policy of dropping such prosecutions where concerns agree to discontinue disliked practices. Moreover, it appears that trust actions will come under the Department of Justice, for the Federal Trade Commission has refused to prosecute a complaint filed under the Robinson-Patman act because "the matter has been taken up with the Department of Justice."

Government to prosecute

Abandonment of its former policy of terminating anti-trust prosecutions by the acceptance of stipulations under which the respondents agree to discontinue the practices complained of, and the carrying of such cases to a decision was urged upon the Department of Justice this month by Representative John M. Coffee of Washington, it was disclosed in Washington last week.

In a letter to Attorney General Homer S. Cummings, dated August 16 and made public by the Congressman this week, Coffee expressed gratification over the department's "diligence in exposing to grand jury investigations the oil monopoly activities.

"I have done some research in this respect," he wrote, "and have seen fit to praise the new attitude assumed by the Department of Justice in refusing longer to continue the consent decree practice which for some time prevailed in connection with prosecution of oil companies and in proceeding with grand jury indictments wherever justified."

Almost simultaneously with the publication of Coffee's letter, it was made known that the department is preparing for an ambitious anti-trust campaign which will involve several of the nation's largest industries.

Details of the attorney general's plans were not made known, but it is understood an early major step in the monopoly attack will be a request upon Congress at the opening of the January session for "stop gap" legislation tightening up the anti-trust statutes, to be followed by permanent legislation revising and modernizing those laws.

Among the industries against which it is reported the department will move are oil, motion pictures, steel, copper and cement. Investigations in the oil industry have been going on for two years, and studies of conditions in the

motion picture, steel and other industries are said to be now under way.

The government plans for attack against monopolistic practices are seen as a projection of the Administration's program to regulate "big business," evidenced in heavy taxation of business enterprises, the proposed wage and hour measure and other legislation.

The department's attack upon the major oil companies is to be carried into every marketing area east of the Rocky Mountains, while west of the Rockies the situation will be handled under the consent decree secured several years ago, probably through new court proceedings if the department adopts the policy of seeking convictions.

Extension of the oil inquiry is said to be encouraged by the government's success in securing indictments by the Madison, Wis., grand jury, selected as a "test" to determine what chance there was of getting action on monopoly charges against the major integrated companies. Investigations are now being made in the New York area, after which it is expected the government agents will move into the South.

Commission refuses to act

Refusal of the Federal Trade Commission to prosecute a complaint of price discrimination in the sale of crude petroleum under the Robinson-Patman anti-price discrimination act was disclosed this week by Chairman A. W. Ayers in a letter of Representative Wright Patman of Texas, co-author of the measure, outlining the activities of the commission during the first year of the law's operation.

The complaint, the makers of which were not named by the commissioner, charged that several concerns are engaged in a conspiracy to monopolize the production and refining of crude oil in a limited area by means which include making contracts for the purchase of crude oil in that area at prices above the posted field price, and subsequently raising the posted price substantially; and selling crude oil from area to certain users at prices below the posted field prices in order to create a demand which will reduce the supply available for independents. Because of the fact that the applicant had filed an identical complaint with the Department of Justice, which now has the matter under investigation, it was explained, the commission refused to take action.

When to tax

Champlin Refining Company, contending that crude produced after July 1 and run into storage is not subject to ad valorem taxes for the following fiscal year, and seeking such a decision before the supreme court, had fourteen other oil companies supporting their contention. Action was brought due to an assessment of $110,796 on January 1, 1935, against 182,972 barrels of oil at the firm's Enid plant. Champlin Refining Company holds the opinion that a gross production tax was paid on the oil and that no other taxes should have been assessed in the year in which the crude was produced. Garfield County, assessing, contended that the oil enjoyed exemption the year of its production, but that it was assessed on January 1, 1935, for the 1935-1936 fiscal year.

Labor Situation

CIO is active . . . Plans to demand more pay from ITIO . . . Threatens strike of W. P. Pine workers . . . Files complaint against Humble company union.

THE Oil Workers' International Union, which represents the C.I.O. in the oil industry, last week largely monopolized the stage in the drama of labor unrest.

In widely scattered sections of the United States, the C.I.O. was engaged in much activity and agitation.

In Oklahoma, the big labor union was preparing to demand more pay and shorter hours for employees of the Indian Territory Illuminating Oil Company, and was threatening a strike among the employees of W. B. Pine, independent oil operator in the Seminole district.

Election Recommended

In North Texas, the C.I.O. organization last week was given the support of a National Labor Relations Board trial examiner, in its demand for reinstatement of discharged employees of the Waggoner Refining Company; and the examiner recommended also that an election be held to determine what organization should become the official bargaining agency for the Waggoner employees.

Complaint Against Humble

From the Texas Gulf Coast, the C.I.O. sent an official complaint to the National Labor Relations Board director at Fort Worth, charging that the Humble Oil & Refining Company had coerced its employees in regard to labor matters. The employees at the Baytown refinery of the Humble company some time ago perfected an independent organization for bargaining with the management of the company. A majority of the employees chose to become affiliated with this independent union instead of joining the C.I.O. or any other national labor organization. In the complaint that was filed against the Humble company, the concern was charged with having "interferred with, restrained, and coerced its employees in their right to self-organization and to joining labor organizations." It was alleged, further, that the company sponsored and financially aided the employees' federation.

At Long Beach, California, the C.I.O. local union voted to withdraw from the State Federation of Labor, the state organization for the American Federation of Labor.

Negotiations Postponed

In the Los Angeles area, California, there has been a postponement until late in September of negotiations among the Shell Oil Company, the C.I.O. and four A. F. of L. affiliates. The postponement was requested by the C.I.O. The rival unions both seek to represent the Shell employees in labor matters. The C.I.O. unions have been suspended from the state federation.

The National Labor Relations Board is scheduled to hold a hearing August 30 to determine whether or not an election should be held in the El Segundo refinery of the Standard Oil Company of California. If such an election is ordered, the workers will choose among the C.I.O., A. F. of L., and an independent union, as the official agency for bargaining with the management of the company.

Stanolind Workers Organize

While the national labor unions have been active, there has also been a further demonstration of the working of an important independent union. On the Texas-Louisiana Gulf Coast, the employees of Stanolind Oil & Gas Company have worked out an organization similar to the independent union of the Humble company's employees at Baytown. Over two-thirds of the field employees of the Stanolind company on the Gulf Coast have become affiliated with this independent union.

The field workers of the Stanolind company, numbering about 1000, last week sent representatives to Houston to perfect the organization of the independent union and to confer with the president of the company, F. O. Prior of Tulsa. The company operates in 10 different fields of the Gulf Coast, and each of the fields sent from one to two delegates.

These representatives at the Houston meeting elected Randolph Yost, Stanolind driller at Big Hill field, as president of the new union. College-trained, Yost has worked up from the bottom. The Stanolind representatives were authorized to deal directly with the president of the company regarding collective bargaining arrangements. The agreement that was worked out at the Houston meeting can become effective only with the approval of the members of the union, and ballots soon will be circulated among the workers so that they may vote on the proposal.

The outlook for future operation of the oil industry in Mexico remains clouded, pending action by President Cardenas on the economic survey of the industry completed recently by an official investigating commission.

The commission has rejected a proposal of the oil companies for increasing their payrolls in Mexico, declaring that the companies are able to make more generous payments than those offered. The companies had proposed to increase payrolls $4,500,000 and to apply a 40-hour week with 56 hours pay.

After the investigating commission had officially objected to this proposal, the oil companies, in reply to the com-

[*Continued on page 166*]

Proration Matters

Seven Kansas fields to take potentials . . . Fitts operators consider water disposal plans . . . Many field hearings are scheduled by Texas commission.

WITH the exception of a hearing held by Fitts operators to consider salt water disposal, proration activities of the week consisted of the scheduling of a number of meetings, particularly by the Texas Railroad Commission.

Kansas potentials

Potential tests will be taken August 30 of seven Kansas pools. Eight hours will be required for the complete runs. Tests are to be made on the Johnson and Chinberg pools of McPherson County, Halstead pool of Harvey County, Welsh pool in Rice County, Greenwich pool in Sedgwick County, and the David pool in Cowley County. Potentials will be calculated from tank tables, which operators should have available prior to tests.

Fitts water disposal

A meeting of Fitts (Oklahoma) field operators last week examined proposed means of disposing of salt water being produced in the pool.

R. L. Hodges, director of pollution control for the water conservation division of the board, developed a plan of disposal whereby brine would be gathered into a 500,000-barrel capacity reservoir near the source of Clear Boggy Creek. A 14-inch gathering line, serving as a gravity flow system, would loop the productive area of the field.

Following treatment to separate oil carried with the salt water, the brine would be discarded. Final disposal could either be into barren sand strata through a well north of Stonewall fault, or into a dam proposed in Section 7-2n-7e, at a point on North Canadian River at a point where the banks form a partial closure to make dam construction comparatively simple. From such a dam collected brine could be fed into the river at high stage; this to materially reduce the degree of contamination.

Operators in Fitts field have been engaged in making a careful study of salt water production, treatment, and ultimate disposal. Until recently, brine production has been of comparatively small volumes, and has been disposed of by evaporation within the field. A number of operators combined to drill a test to determine receptive factors of sands north of the fault, and although sulphur water was found in the strata, large volumes of brine have been introduced into the horizon by means of pumps.

Texas hearings set

A hearing on the Saxet Frio has been called by the Texas Railroad Commission for September 3 at Austin. At this hearing, the Commission will take evidence relating to the method of allocation for wells in the 5700-foot sand.

Some operators are of the opinion that the method of allocation should be revised to conform with that used in distributing the allowance to wells producing from other horizons in this field.

A hearing to consider recycling of gas in the Cayuga field, Anderson County, has been set for September 8 at Austin. The hearing was called by the Texas Railroad Commission in response to a request from the Tide Water Associated and Seaboard Oil companies. The companies have asked for a permit which will allow them to produce gas from wells, strip this gas, and then return the residue to the sand from which it was produced.

The Texas Railroad Commission has issued notice that a hearing will be held in Austin on September 7 to consider institution of special spacing rules for the Rotan area in Fisher County. Sunray Oil Company filed the request, pointing out that the new Lewis Production Company Morrow 1, a large producer, has been completed near the Rotan townsite. It is located in Section 172, Block 2, H&TC Ry. Survey.

Determination of proper gas-oil ratios for wells in the Long Lake field, Anderson, Freestone and Leon counties, will be considered at a hearing before the Texas Railroad Commission to be held in Austin on September 8.

Legislative Affairs

Federal prospecting permit extension bill signed by Roosevelt . . . May call special Pennsylvania session to tax oil . . . Gas inquiry starts soon.

WITH Congress and most of the oil-producing state legislatures adjourned for the summer, there were but few legislative developments the past week. However, the president signed a Congressional-passed bill providing for extension of federal prospecting permits, and Pennsylvania heard rumors of a special tax session that probably would study oil as a source of revenue. Meanwhile, arrangements were made of Pennsylvania's gas investigation to get under way.

Prospect permit bill signed

President Roosevelt on a "working vacation" at his Hyde Park home, on August 27, signed the measure providing for a 2-year extension of outstanding prospecting permits which can meet certain requirements.

The bill was passed by the House and Senate late last month. In order to procure extension to December 31, 1939, provided for in the measure, it will be necessary for permittees to show they have complied with simple provisions written into the bill by the Senate. The latter were placed in the bill in order to prevent the extension of permits which were secured, but under which no effort at discovery or development has ever been made.

Pennsylvania taxes

Pennsylvania oil men are concerned over rumors that Governor George H. Earle will call a special session of the legislature for September or October to levy additional taxes, among them levies on fuel oil and lubricating oils.

A proposal to tax fuel oil 2 cents a gallon was defeated during the recent session, but failure of the legislature to agree on other tax measures to raise funds said needed for relief and other state government purposes may bring different action if the fuel oil tax is again brought before state solons.

Definite special session plans are being held in abeyance pending Governor Earle's return from a vacation trip in Europe.

Pennsylvania gas inquiry

A statewide investigation of the natural gas industry will be launched September 1 by the Pennsylvania Public Utility Commission with hearings on four companies scheduled at Ridgway. The commission has announced its probe would embrace all the 104 companies operating in the state.

The September 1 hearings will be on St. Mary's Natural Gas Company, Ridgway Natural Gas Company, Clarion Natural Gas Company and James City Gas Company. On September 2 and 3, the following companies will be the subject of hearings held at Bradford: United Natural Gas Company, Crosby Natural Gas Company, Citizens Gas Company, Finnessy & Company, Smethport Natural Gas Company, North Penn Gas Company, Dempseytown Gas Company, Alum Rock Gas Company and Allegany Gas Company.

Going Deeper For Oil This Year

Average drilling depth in United States has been steadily increasing for several years, and 1937 is bringing a continuation of the trend . . . Influence of new, deep fields is reflected.

By L. J. LOGAN,
Associate Editor

IN the never-ceasing search for new oil fields and new pay zones to take the place of those being depleted, the oil industry is finding it necessary to drill deeper and deeper.

For several years there has been a pronounced, steady increase in the average depth of new wells completed in the United States.

This year that trend is being extended, and for 1937 the average depth reached is the greatest in the history of the industry.

This year has brought, moreover, an acceleration of the increase in drilling depths, as compared with the increases of preceding years.

Depths Increase Sharply

The average drilling depth for the United States has jumped to 3225 feet per well in the first 7 months of this year from 3052 feet for all 1936, whereas the 1936 average was an increase only from 2965 feet in 1935.

In the first 7 months of this year, 15,917 tests, including dry holes and gas wells in addition to oil wells, were completed. The depths of those holes combined amounted to 51,331,357 feet. Thus the average depth per well for this year's new wells was 3225 feet.

Effect Far-Reaching

The implications of this steady trend toward greater drilling depths are important, and affect the public as well as the industry —the consumer of oil as well as the supplier.

The deep drilling trend emphasizes, primarily, the fact that the United States slowly but surely is moving toward that time, often discussed but seldom taken seriously, when crude oil will be less plentiful and more expensive to obtain.

The deep-drilling trend indicates that the country has been fairly well combed for shallow fields; that the new fields appearing in the picture are predominantly deeper than older fields; that the best chances for finding new fields and new pay zones lie in deeper drilling.

From the viewpoint of the public, this trend in drilling constitutes reason for active interest in oil conservation. Since it is increasingly difficult to find and to produce oil, the public is justified in wanting reasonable conservation of present supplies, both for national defense in time of war and for peace-time use.

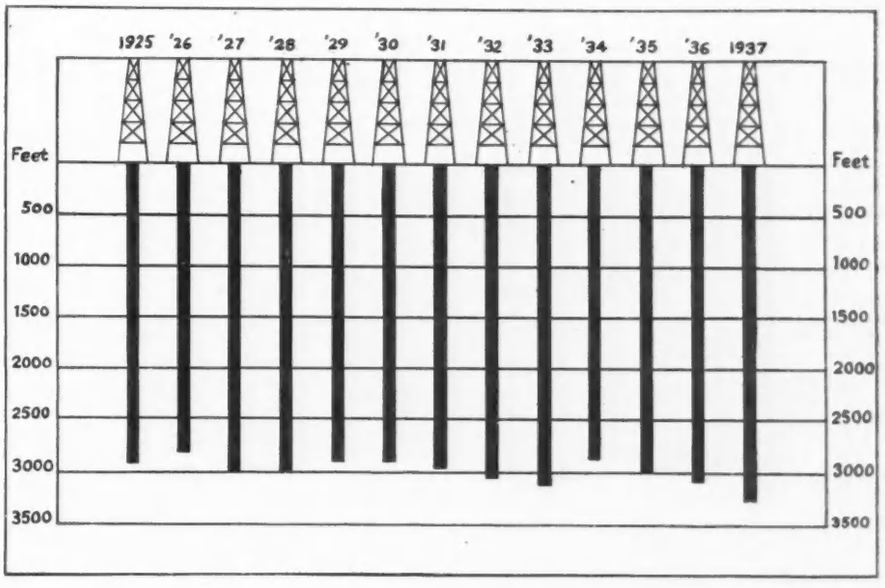
In so far as the petroleum industry is concerned, the deeper drilling is significant for all branches of the business. It importantly affects the exploration, drilling, producing, and refining divisions of the industry, and to lesser extent the transportation and marketing branches.

Exploration Progresses

The increasing depths at which oil is being found constitute both a tribute and a challenge to the exploration division. The deeper fields that are being discovered have been found largely through the efficient and successful geological and geophysical methods now employed.

But by now many deep fields have been discovered, and the number remaining has been reduced to that extent. Again and again the geologists and geophysicists have had to lower their sights

Average Drilling Depth in 1937 Greatest on Record



to deeper levels, solving the problems that arose in that connection.

With new fields and new pay zones being opened from increasingly greater depths, the drilling division of the industry, like the exploration branch, has had its ingenuity tested and has ably carried its burden.

Just as the deeper drilling has imposed heavy responsibilities on the exploration and drilling divisions of the industry, it also has made necessary scientific and efficient operation of the producing division. If a field is 7000 feet deep, it naturally costs more to develop than if it were 2000 feet deep.

In the refining branch of the industry, also, the trend toward deeper wells has significance. For as a rule, the crude oils from varying depths have different characteristics, serve different purposes, and require different processing in the refineries. The oils from deeper horizons are, for instance, generally lighter, and those from shallower fields are heavier; indicating that the proportion of light oils is tending to increase, while the proportion of heavier oils is growing smaller, as new, deeper fields replace old, shallower fields.

Deeper Drilling General

The trend toward deeper drilling has been nationwide in scope, most of the states and major districts having shown greater average depths in 1937 than in preceding years.

Drilling Depths in the United States 1925-1937

YEAR	Wells Completed	Footage Drilled	Average Depth per Well
1925.....	25,406	73,677,400	2900
1926.....	28,995	81,186,000	2800
1927.....	22,301	66,903,000	3000
1928.....	19,964	59,892,000	3000
1929.....	23,463	67,925,285	2895
1930.....	19,848	57,557,200	2900
1931.....	11,716	34,259,110	2924
1932.....	14,290	43,033,422	3011
1933.....	11,700	36,270,000	3100
1934.....	17,508	49,803,556	2845
1935.....	20,751	61,523,100	2965
1936.....	23,919	73,000,320	3052
*1937....	15,917	51,331,357	3225

* First seven months

The Louisiana Gulf Coast still is far out in front as the country's outstanding deep drilling district. The 265 wells completed there in the first 7 months of this year had an average depth of 6263 feet. That represented a large increase over the average of 5774 feet per well in 1936. South Louisiana has numerous deep fields, including the two deepest producing areas in the world; namely, Lirette field, Terrebonne Parish, producing from 11,630 feet, and Horseshoe Bayou field, St. Mary Parish, producing from 10,873 feet. Other fields also are comparatively deep, and the success in finding production at the great depths has promoted the drilling of many unusually deep wildcats, including a considerable number below 10,000 feet.

Coastal Texas Second

The Texas Gulf Coast is running a god second for deep drilling honors, especially when it is considered that the district is furnishing more than three times as many completions as the Louisiana section of the Gulf Coast. As compared with the 6263-foot average for Coastal Louisiana, the Texas Gulf Coast this year averaged 5553 feet per well.

(Alabama is not qualified for second place, despite its 6112-foot average drilling depth this year, for only one well was completed.)

Ranking next after the Texas Gulf Coast is Colorado, which this year furnished 6 new wells averaging 5277 feet deep each. But that state also had too little drilling for ranking here. And third place belongs to North Louisiana, which had an average drilling depth of 4224 feet through completion of 213 wells, compared with an average of 4164 feet last year.

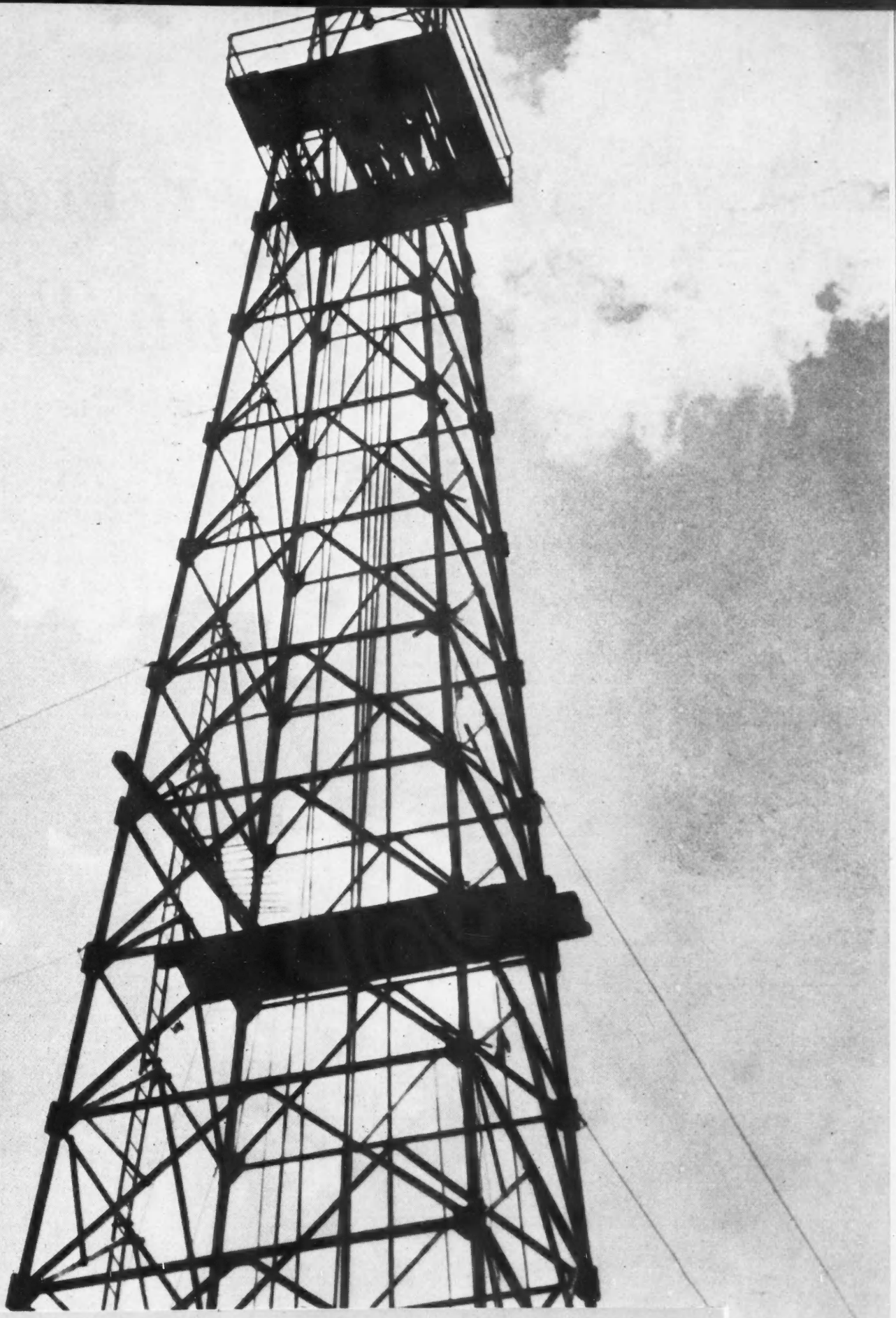
Still in fourth place, as it was last year, Cailfornia has had this year an average drilling depth of 4051 feet, established through completion of 838 wells. The average is a little smaller than for 1936, when it was 4127 feet per well.

Wells, Footage, and Depths Drilled in Past Four Years

(Determined from The Oil Weekly's records on depths of completed wells)

STATE OR DISTRICT	Wells Completed				Footage Drilled				Average Depth per Well			
	1934	1935	1936	*1937	1934	1935	1936	*1937	1934	1935	1936	*1937
Arkansas	93	123	90	48	277,635	352,310	287,119	159,871	2985	2864	3190	3331
California	675	1,092	1,123	838	3,110,462	4,546,671	4,634,528	3,395,053	4608	4164	4127	4051
Eastern States	2,265	2,465	2,959	1,653	3,779,438	4,254,368	5,411,153	3,291,709	1669	1726	1399	1909
Illinois	.....	.....	4	84	.....	.....	7,348	116,243	....	....	1837	1384
Indiana	.....	.....	165	70	.....	.....	143,525	70,795	....	....	870	1011
Kentucky	.....	.....	273	191	.....	.....	197,950	201,945	....	....	729	1057
New York	.....	.....	.....	6	.....	.....	.....	24,822	....	....	....	4137
Ohio	.....	.....	1,918	810	.....	.....	3,715,980	1,557,136	....	....	1937	1922
Pennsylvania	.....	.....	.....	103	.....	.....	.....	288,556	....	....	....	2802
West Virginia	.....	.....	599	498	.....	.....	1,346,350	1,345,590	....	....	2248	2700
Kansas	926	1,314	1,722	1,446	2,760,400	4,044,907	5,442,549	4,524,251	2981	3078	3161	3129
Louisiana	801	732	994	478	2,833,358	3,219,665	4,844,021	2,559,573	3537	4398	4873	5334
North Louisiana	403	321	556	213	903,406	850,409	2,315,062	899,818	2242	2649	4164	4224
South Louisiana	398	411	438	265	1,929,952	2,369,256	2,528,959	1,659,755	4849	5764	5774	6263
Michigan	483	602	756	507	1,403,480	1,612,782	1,933,671	1,535,188	2947	2679	2558	3026
Oklahoma	1,925	2,320	2,857	1,820	5,154,203	6,679,371	8,968,906	5,522,593	2678	2879	3139	3033
Rocky Mountain States	385	558	879	563	1,032,420	1,696,103	2,937,703	1,957,167	2682	3040	3342	3476
Colorado	.....	.....	19	6	.....	.....	67,580	31,363	....	....	3557	5277
Montana	.....	.....	193	97	.....	.....	466,280	208,612	....	....	2416	2151
Nebraska	.....	.....	1	.....	.....	.....	4,040	.....	....	....	4040	....
New Mexico	.....	.....	564	401	.....	.....	2,130,078	1,538,333	....	....	3777	3811
Wyoming	.....	.....	102	59	.....	.....	269,725	178,859	....	....	2644	3031
Southeastern States	43	20	12	7	156,620	74,750	35,042	22,255	3642	3737	2920	3179
Alabama	.....	.....	2	1	.....	.....	7,470	6,112	....	....	3735	6112
Florida	.....	.....	2	.....	.....	.....	3,590	.....	....	....	1795	....
Mississippi	.....	.....	8	6	.....	.....	23,982	16,143	....	....	2998	2691
Texas	9,912	11,525	12,527	8,448	29,295,540	35,042,173	38,505,628	28,050,319	2956	3041	3074	3320
East and East Central Texas	4,036	4,435	3,193	1,862	14,773,681	16,154,874	11,993,420	7,449,359	3664	3642	3756	3786
North Texas	2,000	2,136	2,179	1,384	2,455,372	2,634,556	2,999,559	2,201,932	1228	1233	1377	1591
South Texas	1,387	1,950	3,321	2,082	3,792,208	6,114,705	10,639,909	7,382,510	2734	3136	3204	3498
Texas Gulf Coast	1,024	1,103	1,127	857	4,805,157	5,243,960	5,906,387	4,758,852	4692	4754	5241	5553
Texas Panhandle	463	670	665	412	1,319,923	1,974,259	1,986,952	1,257,315	2851	2947	2988	3052
West Texas	583	813	1,579	1,593	1,577,190	2,298,274	4,251,034	4,575,966	2706	2827	2692	2873
West Central Texas	419	418	463	258	572,009	621,545	728,367	424,385	1365	1487	1573	1645
United States	17,508	20,751	23,919	15,917	49,803,556	61,523,100	73,000,320	51,331,357	2845	2965	3052	3225

*First seven months.



SOUTH TEXAS NUMBER

The OIL WEEKLY, Aug. 30, 1937

Banner Year in South Texas'

By EARL S. POST, Staff Writer
and
WARREN L. BAKER, Editor

South Texas' Crude Reserves have increased 147 percent the past 2½ years, in contrast with a 7.3 percent gain by the nation. Today, after a year of finding nearly a million barrels of new oil daily, it holds 6.02 percent of the known reserves of the country that remain in the ground.

South Texas' Daily Production is at an all-time peak. During 1937, it is expected to exceed its 1936 recovery by 57 percent, compared with an increase of probably 20 percent in the United States. The region accounts for 6.7 percent of the United States daily production at this time.

South Texas' Discovery Rate is the highest in the nation. Already in 1937 it has found more new fields and new producing horizons in old fields than in all 1936, when it came near leading all states. An average of nine strikes per month were made the first half of this year.

South Texas' Drilling Activity, which amounts to 13.6 percent of nation's work, is exceeding the increase of the country by but 1 percent. But more wells are finished in this region than in the second ranking state. Moreover, it is ahead of any district within the State of Texas.

SOUTH TEXAS, called Southwest by some, rapidly is assuming an ever increasingly larger role in the United States oil picture.

It is experiencing an all-time peak in drilling activity and a remarkably huge number of discoveries, which are enabling the area to produce its greatest daily recovery in history and still steadily expand its volume of known producible crude reserves to an ever rising record level. However, these do not truly reflect its recent vastly greater significance, since the nation as a whole also is exceeding previous levels in most of these classifications.

Growing National Importance

Much more clearly indicating the swift advancement of South Texas in the national picture, is that its rates of increase in each of these classes are excelling the gains being registered by the United States. During the past 2½ years, the progress of South Texas has not been surpassed by any district in Texas, or any other outside state.

A comparison of the rates of increase in production, drilling and crude reserves in South Texas and that in the U. S. form an interesting story of achievement.

Peak Daily Production

Although the United States daily crude production has expanded materially, registering a gain of 17 percent the first half of 1937 over the corresponding period of the preceding year, South Texas has increased the percent of the nation's oil it recovers.

In producing 51,601,400 barrels during the year 1936, this 60-county, 42,000,000-acre region yielded 4.7 percent of the nation's crude output. Whereas, in producing just short of 40,000,000 barrels the first six months of 1937, South Texas produced 6.7 percent of all the oil recovered in the nation in the period, despite the growth shown by the country.

Based on its production yield rate so far, it is anticipated South Texas will produce in excess of 80,000,000 barrels during 1937. This would represent an increase of 30,000,000 barrels over 1936, or a gain

Developments Boost National Importance

of approximately 57 percent, in contrast with the expected 20 percent enlargement of the U. S. annual production. It would not be surprising to find South Texas' daily yield for 1937 averaging 100,000 barrels more than in 1936.

Reserves Soar Higher

Despite the unusually sharp upward trend of its daily recovery, South Texas operators have been able to find a sufficient quantity of oil to offset withdrawals, and to add considerably to its known crude reserves in the ground. In this respect, the area also is increasing much more sharply than the nation.

It is estimated that during the 12-month period ending July 1, 1937, that a total of 335,877,454 barrels of new crude oil were discovered in South Texas. Thus, South Texas operations were resulting in the finding of an average of 27,989,788 barrels of petroleum monthly, or a supply of nearly a million barrels daily.

This factor enabled the region to produce its record level output, and at the same time increase its crude reserves by 270,695,311 barrels, a gain of 52 percent. This raised the amount of reserves in the territory to an all-time peak of 786,695,311 barrels, which represents an increase of 469,999,980 barrels, or 147 percent, in the 2½ years since January 1, 1935. The nation from January 1, 1935, to January 1, 1937, showed an increase in reserves of but 7.3 percent.

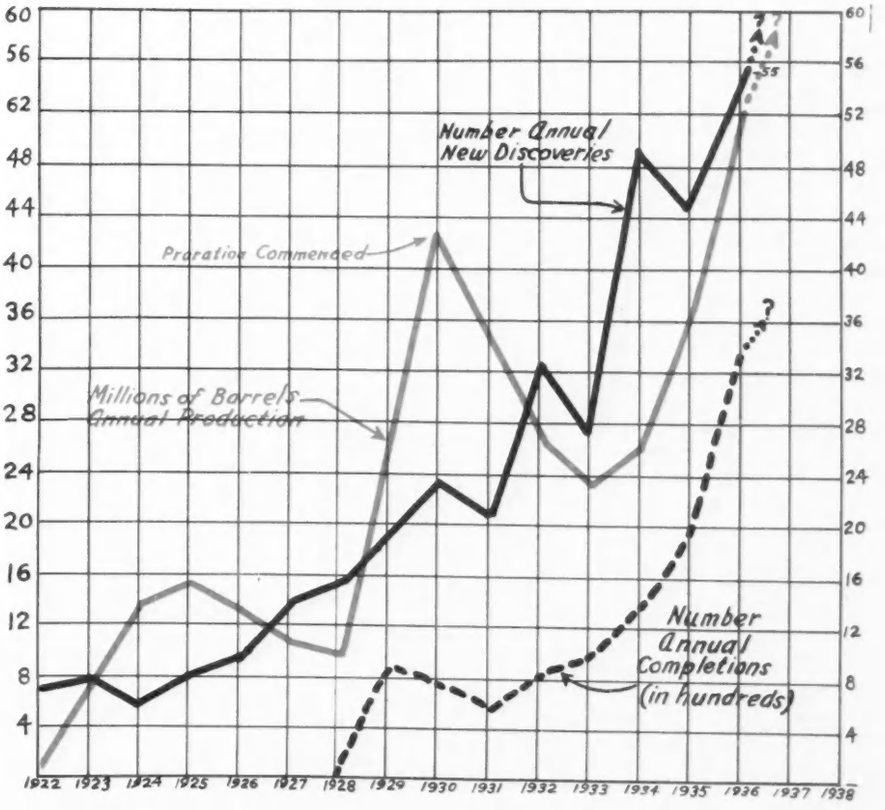
On January 1, 1935, South Texas reserves were estimated to be 316,492,413 barrels. Eighteen months later, on July 1, 1936, the region's reserves were 515,797,082 barrels, an increase of 199,304,669 barrels, or 11,072,482 barrels per month. In establishing a gain of 270,695,311 barrels the past year, the area's monthly average crude reserve increase was 22,557,942 barrels, more than double its rate in the preceding 18 months. And, this record has been made in face of a 57 percent gain in daily production.

As of July 1, 1937, it is calculated that 6.02 percent of the producible known reserves still in subsurface reservoirs of the United States were located in South Texas, which compares with a percentage of 3.98 percent on July 1, 1936. On January 1, 1935, South Texas could claim only 2.59 percent of the nation's reserves. Therefore, it has more than doubled in the past 2½ years, the percentage of the U. S. reserves it contains.

While the territory was enhanc-

FIGURE 1

South Texas' annual production, new discovery and completion rates are rising sharply and follow closely parallel curves, with the exception of the period immediately following the first reduction of yield through proration. The chart shows that the more wells completed, the greater is the number of discoveries and volume of yield in the region.


Number Annual New Discoveries
Proration Commenced
Millions of Barrels Annual Production
Number Annual Completions (in hundreds)
1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

ing materially its crude reserve status in comparison with that of the nation, it was doing the same thing, only on a larger scale, so far as the State of Texas was concerned. While it held 5.75 and 8.58 percent of Texas' reserves on January 1, 1935, and July 1, 1936, respectively, South Texas had 12.25 percent of the state's crude reserves midway of this year. This increase of 6½ percent the past 2½ years is remarkable, in view of the growth of the state, which boosted its reserves 17 percent from January 1, 1935, to January 1, 1937.

Therefore, South Texas' reserves have been excelling the rate of growth of the nation by 139.7 percent, and that of Texas by 130 percent.

Discovery Rate Jumps

Although having a banner drilling year, it is its rate of discoveries that is enabling South Texas to become a greater factor in the national oil picture.

In the number of new fields and producing zones found, South Texas is so far out in front of other regions that, in the words of the race track, "they can see only its dust." The year 1936 saw South Texas ranking high with 54 discoveries, or 4½ a month. But, in the first half of 1937, it had 55 strikes, or 9 per month, which is a full 100 percent gain in just half the time.

Table 3 shows the rate of discoveries in Southwest Texas by years. It will be noted that it gained little prominence until after 1920, and that after this time it was fairly consistent in enlarging its number of yearly strikes, with the increase getting larger in recent years. From four discoveries in 1920, which was a peak record at the time, it jumped to eight in 1925, then to 24 in 1930, to 49 in 1934, on to 54 in 1936 and at its present rate might reach 100 during 1937.

Drilling Has Increased

The number of completions in the territory the first half of 1937 represented an increase of 17 percent over the same period of 1936, but this was only one percent in excess of the gain shown by the nation.

South Texas really registered its growth in drilling during 1936. During that year it had 3321 completions as compared with 1950 the preceding year, and with 1387 in 1934. The latter was the first time its operations had exceeded 1000 in a 12-month period.

The first half of 1937 saw 1832 completions, which exceeded its 1936 rate, as only 1749 tests were finished the last half of 1936, and 1572 the first half.

In the first six months of 1937, South Texas accounted for 13.6 percent of all the completions made in the United States. This was the largest percentage registered by any district in Texas, and exceeded that of any other state. For example, Oklahoma, which ranked second to Texas in number of completions, finished but 11.3 percent of the nation's completions.

Ultimate Yield Hiked

Estimates on the ultimate yield to be obtained from fields in South Texas are being increased. Of course, this largely is the result of new discoveries.

Calculated ultimate production of South Texas has been doubled in the past 2½ years, rising from 571,892,404 barrels on January 1, 1935, to 1,171,314,407 barrels on July 1, 1937. This is a gain of 598,422,003 barrels.

Estimates on the per acre ultimate recovery also are jumping, due mostly to the higher yield expected from new fields. From an average yield of 7673 barrels per acre on January 1, 1935, the estimate of per acre recovery has grown to 10,700 barrels on July 1, 1937. In this connection, it is of

TABLE 1

Comparison of Reserves in South Texas for Past Three Years by Producing Horizons

FORMATION	Number Acres	Number Wells	Expected Acre Yield	Estimated Ultimate Yield	Cumulative Recovery	Remaining Reserve	Percent of South Texas Reserve	
Miocene-Oligocene								
January 1, 1935	18,270	.....	7,507	137,158,500	39,062,547	98,095,953	30.99	
July 1, 1936	20,565	1,420	14,012	288,151,031	60,250,309	227,900,722	44.18	
July 1, 1937	31,405	2,477	16,528	519,086,304	92,904,526	426,181,778	54.19	
Change Past Year	+10,840	+1,057	+2,516	+230,935,273	+32,654,217	+198,281,056	+10.01	
Jackson-Yegua								
January 1, 1935	28,053	.....	8,066	226,268,200	57,723,726	168,544,474	53.25	
July 1, 1936	37,881	4,380	7,950	301,172,247	88,861,661	212,310,586	41.16	
July 1, 1937	46,300	5,672	8,587	397,574,793	111,162,826	286,411,967	36.41	
Change Past Year	+8,419	+1,292	+637	+96,402,546	+22,301,165	+76,101,181	—4.75	
Navarro-Taylor								
January 1, 1935	19,215	.....	916	18,592,900	14,548,576	4,044,324	1.28	
July 1, 1936	19,215	2,293	991	19,039,675	15,312,852	3,726,823	0.72	
July 1, 1937	19,465	2,325	953	18,541,525	15,867,477	2,674,048	0.34	
Change Past Year	+250	+32	—38	—498,150	+554,625	—1,052,526	—0.38	
Serpentine								
January 1, 1935	3,685	.....	5,897	21,730,304	15,825,625	5,904,679	1.87	
July 1, 1936	3,715	787	6,132	22,780,250	17,881,856	4,898,394	0.95	
July 1, 1937	3,980	807	5,758	22,915,000	18,868,592	4,046,402	0.52	
Change Past Year	+265	+20	—374	+134,750	+986,736	—851,992	—0.43	
Austin Chalk-Edwards Lime								
January 1, 1935	5,285	.....	31,815	168,142,500	128,238,517	39,903,983	12.61	
July 1, 1936	7,550	1,297	27,191	205,293,750	138,333,193	66,960,557	12.98	
July 1, 1937	8,315	1,467	25,640	213,196,785	146,178,198	67,178,198	8.54	
Change Past Year	+765	+170	—1,551	+7,903,035	+7,845,005	+187,641	—4.44	
							Of Nation	**Of Texas**
Total—All Zones South Texas								
January 1, 1935	74,528	.....	7,673	571,892,404	255,398,991	316,492,413	2.59	5.75
July 1, 1936	88,921	10,177	9,406	836,436,953	320,639,871	515,797,082	3.98	8.58
July 1, 1937	109,465	12,748	10,700	1,171,314,407	385,822,014	786,492,393	6.02	12.25
Change Past Year	+20,544	+2,571	+1,294	+334,877,454	+65,182,143	270,695,311	+2.04	+3.67

interest that estimates on the per acre yield on the Navarro-Taylor, Serpentine, and Austin Chalk-Edwards lime zones, the older formations, have been reduced. Therefore, the increase is due to the Miocene-Oligocene and Jackson-Yegua horizons, which are the newest geological producing members in South Texas.

Cumulative Yield Rising

So far South Texas does not rank high in the amount of cumulated production, but its yield during the past two years is causing it to forge forward rapidly. South Texas' production history, which commenced in 1905, resulted in the production of but 255,398,991 barrels during the first 20 years, or up until January 1, 1935. In the 2½ years since that date it has produced approximately half as much as it did in the previous 20 years, yielding 130,423,023 barrels to raise its total to 385,822,014 barrels on July 1, 1937. By the first of 1939, its output for four years, should exceed the quantity produced in its first 20 years.

TABLE 3

Rate of Discoveries in Southwest Texas by Years

YEAR	New Fields	New Horizons*	Total Discoveries
1905	1	0	1
1909	2	0	2
1910	0	1	1
1912	2	0	2
1913	1	0	1
1914	2	0	2
1915	2	0	2
1916	1	0	1
1918	1	1	2
1919	1	0	1
1920	4	0	4
1921	5	2	7
1922	5	2	7
1923	5	3	8
1924	4	2	6
1925	4	4	8
1926	6	3	9
1927	7	7	14
1928	8	7	15
1929	11	8	19
1930	11	13	24
1931	8	13	21
1932	14	19	33
1933	14	13	27
1934	25	24	49
1935	29	16	45
1936	24	30	54
1937†	20	35	55
Totals	217	203	420

* Includes only separate horizons found in already proved fields. In numerous cases, a series of sand lenses have been established in one group; this is referred to as a single zone. An illustration is Loma Novia, where three separate lenses are producing from the lower Government Wells zone.
† 1937 figures are for 6 months only.

TABLE 2

Comparison of South Texas Completion and Production Rates During Past 10 Years

PERIOD	Completions	Oil Wells	Gas Wells	Failures	Initial Production	Annual Production
First half 1937	1832	1278	71	483	520,020	39,799,900
Last half 1936	1749	1462	55	422	570,145	.....
First half 1936	1572	1178	47	347	639,652	.....
Year 1936	3321	2640	102	769	1,209,797	51,601,400
Year 1935	1950	1158	86	706	483,202	31,255,850
Year 1934	1387	709	97	581	227,060	26,723,212
Year 1933	987	455	57	475	210,708	23,520,041
Year 1932	808	403	51	354	142,902	25,009,300
Year 1931	536	226	54	256	79,325	32,192,047
Year 1930	785	513	66	206	418,774	41,895,000*
Year 1929	811	412	109	290	122,956	25,563,700
Year 1928	226	120	37	69	37,694	9,259,600
Year 1927	123	48	59	16	5,734	11,789,220

Note: South Texas completions first half of 1937 were up 17 percent over the same period of the preceding year.
* Proration commenced during year 1930.

More Producing Acres

A good example of the growth of South Texas is reflected by the increase in the number of producing acres, which amounted to 20,544 the past year. This gave the district 109,465 productive acres on July 1, 1937, which was 34,937 more acres than on January 1, 1935.

These figures, of course, mean that the number of producing wells were increasing also. From July 1, 1936, to July 1, 1937, the number of wells rose 2571 to 12,748. Most of these were in the two newer producing zones, namely the Miocene - Oligocene and Jackson-Yegua.

Miocene-Oligocene to Front

Although the newest geological producing zones of consequence, the Miocene-Oligocene formations in the past 2½ years have taken the lead in South Texas. These are found productive in the Coastal region, showing it is this district that is advancing the territory into a commanding position.

Today, 54.19 percent of South Texas' reserves are estimated to be in the Miocene-Oligocene, although a year ago it was credited with but 44.18 percent, and on January 1, 1935, with only 30.99 percent of the discovered unproduced quantity.

Development of the Coastal Trend has really taken place within the past 2½ years, which accounts for the rise of the Miocene-Oligocene formations, or vice versa.

The Miocene - Oligocene was credited with but 98,095,953 barrels of reserves on January 1, 1935. This rose to 227,900,722 barrels on July 1, 1936, and in the year that followed increased 198,281,056 barrels to 426,181,778 barrels. Therefore, reserves of the Miocene-Oligocene zones advanced 328,085,825 barrels in 2½ years, compared with an increase of 469,999,980 barrels for the whole of South Texas.

Per acre recoveries in fields producing from the Miocene and Oligocene are the highest in South Texas. Latest estimates are that 16,528 barrels will be produced from the acres now productive, which is higher by 2518 barrels an acre than calculated on July 1, 1936.

These high per acre estimates account for the Miocene-Oligocene being expected to yield an ultimate of 519,086,304 barrels from present fields as of July 1, 1937, which is 230,935,273 barrels more than at the end of the preceding year.

Although comparatively young insofar as development is con-

TABLE 4

South Texas Cumulative Production by Districts

DISTRICT	ANNUAL PRODUCTION 1934	1935	1936	Cumulative to January 1, 1937
San Antonio	9,412,794	8,412,703	6,712,150	172,127,100
Corpus Christi	9,816,793	12,822,497	25,111,700	85,373,156
Laredo	7,740,786	13,010,304	19,777,550	88,541,858
Totals	26,907,373	34,245,504	51,601,400	346,042,114
First six months 1937, all districts				39,779,900
Cumulative production, all districts to July 1, 1937				385,822,014

This unusual view of a paved highway right through the center of an oil field was taken in the North Sweden pool. It is considered the largest South Texas discovery of the first six months of 1937. Although far from defined, it is expected to yield 8,500,000 barrels of oil.

cerned, the Miocene - Oligocene zones rank high in the number of proven acres, being credited with 31,405 acres, despite having relatively few wells. Being deeper, probably accounts for the use of wider spacing in developing this production.

Cumulative production from the Miocene-Oligocene horizons has been fairly small, due to their shortness of age, but it is the largest daily producer and rapidly is overtaking older formations. Up to July 1, 1937, these two zones had produced but 92,904,526 barrels, however, this was a gain of 32,654,217 barrels in the past year, or half of South Texas' yield during the period.

Briefly the status of the Miocene-Oligocene formations as compared with the while of South Texas on July 1, 1937, was as follows: 29 percent of the proven acres; 19 percent of the wells; 44 percent of the ultimate yield; 24 percent of the cumulative recovery todate; and 54 percent of the future producible crude reserves.

Jackson-Yegua Zone Second

The Jackson-Yegua producing formations rank second to the Miocene-Oligocene in future importance, and in past records exceed the latter. Jackson and Yegua production are found in the Mirando Valley and Coastal regions, in the latter territory overlapping with the Miocene-Oligocene.

Jackson-Yegua fields have more proven acres and a greater number of wells than any productive formations in South Texas. It ranks second to the Austin Chalk-Edwards Lime zone insofar as cumulative production is concerned, and is second only to the Miocene-Oligocene in expected ultimate yield and in unproduced known crude reserves.

The Jackson-Yegua accounts for 42 percent of South Texas' proven acres, for 44 percent of its producing wells, 34 percent of the estimated ultimate yield, 29 percent of the cumulative recovery at this time, and 36 percent of the reserves.

More acres and wells were added in Jackson-Yegua fields in the past year (ending July 1, 1937) than in any other South Texas producing horizons. A total of 8419 acres raised the number of proven productive to 46,300. An increase of 1292 sent the total number of wells to 5672.

This activity caused the Jackson and Yegua combination to increase its ultimate yield, cumulative production and crude reserves. It now has an estimated ultimate recovery of 397,574,793 barrels, an increase of 96,402,546 barrels during the year. The horizon produced 22,301,165 barrels in the 12 months ending July 1, 1937, and now has yielded a total of 111,162,826 barrels. The reserves of the Jackson-Yegua formations are caluculated at 286,411,967 barrels, which is up 76,101,181 barrels from the preceding year.

Chalk and Lime Zones

Due to the highest per acre yields found in South Texas, the Austin Chalk and Edwards lime producing formations lead in cumulative recovery and rank third in reserves among the five geological zones in the region.

Although estimates on the per acre recovery from the Austin Chalk and Edwards lime have been revised downward in the past 2½ years, they are still high. It is estimated that the 8315 proven acres will have an average yield of 25,640 barrels as of July 1, 1937. Total expected ultimate yield is set at 213,196,785 barrels, considerably below the Miocene-Oligocene and Jackson-Yegua zones calculations because of the smaller number of productive acres.

Austin Chalk and Edwards Lime, found productive along the Fault Zone, or San Antonio district, have accounted for 146,178,198 barrels of South Texas' cumulated production. They hold 67,178,198 barrels of estimated remaining crude reserves.

Other Producing Zones

There are two other producing horizons in South Texas, both usually found along the Balcones Fault. These are the Navarro-Taylor and Serpentine, but account for only a small percentage of the territory's importance.

The Navarro-Taylor, with 19,465 proven acres, is given credit for a reserve of but 2,674,048 barrels, and has produced but 15,867,625 barrels.

The Serpentine formation, which has but 3980 wells, has produced 18,968,592 barrels, and is expected to yield an additional 4,046,402 barrels from present productive fields.

Tomoconnor Largest Single Reserve

Table 5 shows the crude oil reserves, cumulative yield, number of acres and other important South Texas data by fields.

The Tomoconnor field of Refugio County, which as yet is undefined, is by far the largest single reserve reservoir. Although only 136 wells have been completed, its productive acreage already is 3640, and it is expected to produce 123,403,202 barrels in the future. Thus far, up to July 1, 1937, it has pro-

duced but 1,596,798 barrels in a three-year period.

Tomoconnor may produce 34,200 barrels to the acre, which, however, ranks second to the per acre yield expected at Darst Creek in Guadalupe County. Darst Creek is expected to produce 40,230 barrels to the acre, having already yielded 22,619.

The Loma Novio field of Duval County has the second largest quantity of known crude to produce, being credited with a future yield of 64,595,947 barrels. A close third is being run by Saxet of Nueces County, which has a crude reserve of 62,995,036 barrels. Greta, in Refugio County, and Gov-

TABLE 5

Indicated Crude Oil Reserves in South Texas by Fields

FIELD AND COUNTY	Age in Mos.	Acres in Oil	No. Oil Wells	Expected Recovery (Barrels)	Recovered to Jan. 1, 1937 (Barrels)	Expected Recovery per Acre	Per Acre Recovery to Jan. 1, 1937	Per Well Recovery to Jan. 1, 1937	Reserve Still in Ground	Is Field Defined
Agua Dulce-Nueces (1)	79	720	22	3,600,000	229,859	5,000	319	10,450	2,370,141	No
Albercos-Webb	122	250	88	2,900,000	2,439,132	11,600	9,756	27,727	460,868	Yes
Alta Mesa-Brooks	6	270	9	810,000	9,015	3,000	312	1,000	800,985	New
Alta Verde-Brooks	16	40	2	100,000	2,353	2,500	59	1,176	97,647	No
Alta Vista-Bexar	300	280	58	120,000	104,121	428	372	1,795	15,879	Yes
Alworth-Jim Hogg	130	80	8	27,793	27,793	333	333	3,337	None	Yes
Angelita-San Patricio	39	10	1	31,104	31,104	3,110	3,110	31,104	None	Yes
Aviator-Webb	181	980	198	6,550,000	5,534,432	6,583	5,647	27,951	1,035,568	Yes
Baldwin-Nueces	24	240	7	1,920,000	331,058	8,000	1,379	47,495	1,588,942	No
Barbacoas-Starr	38	60	3	300,000	23,469	5,000	391	7,823	276,531	No
Batesville-Zavalla	1	20	1	500,000	None	25,000	None	None	500,000	New
Beeville-Bee	22	20	1	15,000	575	750	25	575	14,425	New
Bentonville-King-Jim Wells	14	80	7	500,000	9,680	6,250	121	1,240	490,320	No
Branyon-Caldwell	76	520	112	2,850,000	107,733	5,480	207	962	2,742,267	No
Buchanan-Caldwell	97	160	16	65,000	167,533	4,062	1,047	10,470	482,467	No
Byersville-Williamson	45	250	54	1,200,000	366,345	4,800	1,465	6,784	833,655	Yes
Caesar-Bee	37	620	31	3,000,000	624,971	4,838	1,008	70,160	2,375,029	No
Carolina-Texas-Webb	132	110	15	275,000	251,384	2,500	2,285	16,759	23,616	No
Carroll-Bastrop	58	80	4	100,000	27,734	1,250	346	6,933	72,266	No
Cedar Creek-Bastrop (2)	49	170	17	550,000	190,708	3,235	1,122	11,218	359,292	Yes
Chapman Ranch-Nueces	4	40	2	400,000	None	10,000	None	None	400,000	New
Chapman-Abbott-Williamson	89	450	128	4,650,000	4,156,357	10,333	9,236	32,471	493,643	Yes
Charco Redondo-Zapata	278	570	33	220,000	172,522	386	302	523	47,478	Yes
Chicon Lake-Medina	97	250	28	75,000	21,190	300	84	757	53,810	Yes
Clara Driscoll-Nueces (3)	19	240	16	2,200,000	88,802	9,090	403	5,550	1,911,198	No
Coffey-Bexar	10	10	1	10,000	1,750	1,000	175	1,750	8,250	New
Cole-Webb	156	3,480	338	32,500,000	3,906,235	9,339	1,122	11,349	28,593,765	No
Coletto Creek-Victoria	48	280	23	2,300,000	47,674	8,215	170	2,072	2,252,321	Yes
Calliham-McMullen	223	370	83	1,000,000	572,226	2,307	1,546	6,894	427,774	No
Colmena-Duval	29	160	18	1,000,000	13,345	6,250	83	741	986,655	No
Colorado-Jim Hogg	11	10	1	40,000	5,448	4,000	544	5,448	34,552	New
Comitas-Zapata	35	660	154	2,750,000	301,163	4,166	456	1,955	2,448,837	No
Cooksey-Bexar (4)	81	75	16	72,500	72,057	1,075	1,061	4,976	334	Yes
Crowther-McMullen	312	80	23	35,000	25,000	437	312	1,086	10,000	Depleted
Cuellar-Zapata	123	340	77	2,750,000	2,446,995	8,088	7,197	31,779	303,005	Yes
Cuevitas-Starr	48	450	12	2,500,000	381,352	5,555	847	31,780	2,118,648	Yes
Dale-Caldwell	120	250	50	1,800,000	1,142,756	7,200	4,571	22,855	657,244	No
Darst Creek-Guadalupe	96	1,740	291	70,000,000	39,357,509	40,230	22,619	135,249	30,642,491	Yes
Dirks-Bee	31	820	104	8,600,000	2,456,090	10,487	2,995	23,633	6,143,910	Yes
Driscoll-Duval	81	350	17	3,000,000	551,042	8,571	1,574	32,414	2,448,958	No
Dunlap-Caldwell	73	90	9	400,000	266,911	4,444	2,965	29,656	133,089	Yes
Eagle Hill-Duval	45	340	21	1,250,000	502,110	3,676	1,476	23,910	747,890	No
Eckert-Bexar	106	860	135	1,500,000	749,787	1,744	872	5,554	750,213	Yes
Edna Jackson	48	80	3	80,000	15,000	1,000	187	5,000	65,000	No
El Mesquite-Duval	23	10	1	15,000	976	1,500	97	976	14,024	New
Escobas-Zapata	98	1,960	412	14,500,000	6,208,350	7,398	3,162	15,069	8,291,650	No
Ezzell Ranch-McMullen	1	20	2	180,000	None	9,000	None	None	180,000	New
Flour Bluff-Nueces	12	860	60	19,000,000	88,930	22,093	103	1,482	18,911,070	New
Foley-Bee	9	50	3	300,000	3,688	6,000	73	1,229	296,312	New
Fort Merrill-Live Oak	23	30	2	105,000	25,806	3,500	860	12,903	79,194	No
Ganado-Jackson	3	20	1	100,000	None	5,000	None	None	100,000	New
Gas Ridge-Bexar	212	80	18	75,000	59,131	937	739	3,284	15,869	Yes
Government Wells-Duval (5)	106	7,500	773	80,000,000	28,364,519	10,660	3,782	36,692	51,635,481	Yes
Grayburg-Bee	84	50	3	20,000	18,871	400	377	6,290	1,129	Yes
Greta-Refugio	49	4,420	219	75,140,000	15,560,203	17,000	3,520	71,051	59,579,797	No
Henne-Winch-Farris-Jim Hogg	156	720	147	3,250,000	3,203,911	4,514	4,449	21,795	46,089	Yes
Huper-Calhoun	15	1,400	49	32,000,000	124,505	22,850	889	2,540	31,875,495	No
Hilbig-Bastrop	53	260	14	2,240,000	1,056,206	8,000	4,062	75,443	1,183,794	Yes
Hoffman-Duval (6)	36	660	75	5,000,000	266,480	7,575	403	3,553	4,733,520	No
Hords Creek-Goliad	90	40	2	120,000	19,735	3,000	493	9,867	100,265	No
Ina-Medina (7)	163	360	40	740,000	438,427	2,055	1,218	10,960	301,573	Yes
Jacob-McMullen (8)	62	1,510	113	3,060,000	779,910	2,013	515	6,900	2,260,090	Yes
Keeran-Victoria	65	360	9	5,400,000	558,293	15,000	1,550	62,032	4,341,707	No
Killam-Webb	3	140	11	1,120,000	None	8,000	None	None	1,120,000	New
Kimbro-Travis (9)	32	40	6	40,000	17,977	1,000	449	2,996	22,023	No
Kingsville-Kleberg	202	240	20	1,000,000	659,964	4,167	2,749	32,998	340,036	Yes
Kohler-Duval	123	280	24	700,000	499,051	2,500	1,782	20,794	200,949	Yes
Labbe-Duval	0	80	6	800,000	None	10,000	None	None	800,000	New
La Blanca-Hidalgo	9	240	3	3,200,000	None	13,333	None	None	3,200,000	New
Larremore-Caldwell	109	95	19	325,000	230,012	3,421	2,421	12,100	84,988	Yes
La Sal Viejo-Willacy	10	20	1	200,000	13,220	10,000	666	13,220	186,780	New
Laurel-Webb	60	260	32	780,000	600,449	3,000	2,310	18,764	179,551	Yes
Leaseholders-Webb	202	10	2	25,000	25,000	2,500	2,500	12,500	None	Depleted
Loma Alto-McMullen	26	20	2	120,000	41,153	6,000	2,057	20,576	78,847	No
Loma Novia-Duval	30	7,350	731	70,000,000	5,403,053	9,115	735	7,391	64,596,947	No
Loma Vista-Duval	16	10	1	45,000	5,424	4,500	542	5,424	39,576	No
London-Nueces	5	30	3	150,000	None	5,000	None	None	150,000	New
Luling Townsite-Caldwell	2	20	2	50,000	None	2,500	None	None	50,000	New
Los Olmos-Starr	144	175	76	750,000	473,202	4,285	2,704	6,304	276,798	Yes
Lopez-Webb	24	3,350	315	37,500,000	1,405,943	11,164	420	4,463	36,094,057	No
Luby-Nueces	1	20	1	250,000	None	12,500	None	None	250,000	New
Luling-Caldwell	179	2,220	605	75,000,000	65,227,694	33,800	29,382	107,814	9,772,306	Yes
Lytton Springs-Caldwell	151	1,380	291	8,280,000	8,056,805	6,000	5,838	27,808	123,195	Yes

[Table continued next page]

ernment Wells, in Duval County, are the only other fields with reserves topping the 50,000,000-barrel mark.

Tomoconnor is also the leading field from a total ultimate yield standpoint. Its 125,000,000 barrels tops the 80,000,000-barrels figure given to Government Wells. Next in order comes Greta with 75,140,000, Luling with 75,000,000, and Loma Novio and Darst Creek with 70,000,000 barrels ultimate recovery each.

Luling Leads in Recovery

By a goodly margin, the Luling field of Caldwell County has recovered the most oil, up to July 1, 1937. This pool has produced 65,227,694 barrels. Darst Creek, with 39,357,509 barrels brought to the surface, is second. Then comes Salt Flats, Caldwell County, with 35,260,798 barrels, and Refugio with 32,966,884 barrels.

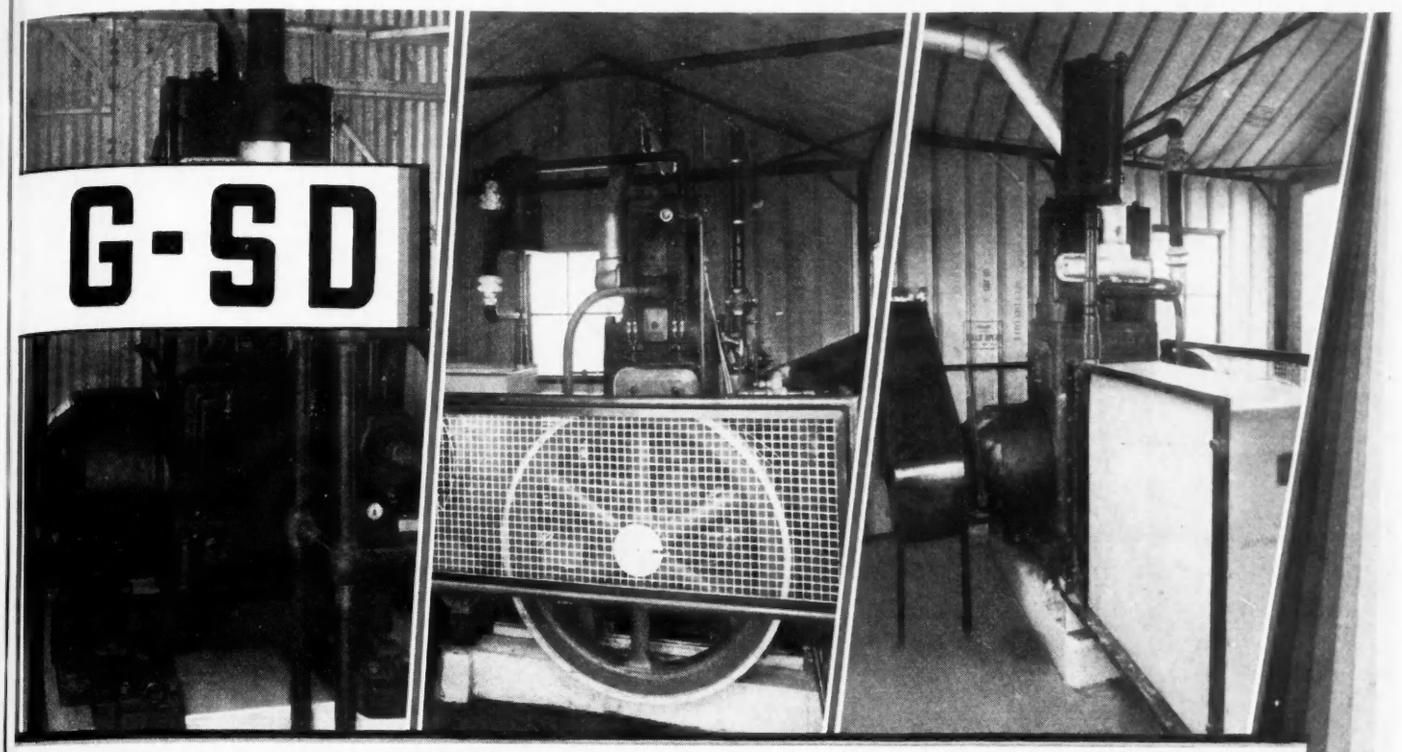
The Somerset field in Atascosa County has the most acres productive with 11,390, and also leads in number of wells, having 1180.

TABLE 5

Indicated Crude Oil Reserves in South Texas by Fields—Continued

FIELD AND COUNTY	Age in Mos.	Acres in Oil	No. Oil Wells	Expected Recovery (Barrels)	Recovered to Jan. 1, 1937 (Barrels)	Expected Recovery per Acre	Per Acre Recovery to Jan. 1, 1937	Per Well Recovery to Jan. 1, 1937	Reserve Still in Ground	Is Field Defined
Manford-Guadalupe	92	40	5	500,000	370,980	12,500	9,275	74,196	129,020	Yes
Mauritz-Jackson	25	30	2	240,000	62,350	8,000	2,078	31,175	177,650	No
McCampbell-Aransas	11	440	30	4,000,000	29,110	9,090	662	9,700	3,970,890	New
McFaddin-Victoria	66	30	2	100,000	96,435	3,333	3,214	48,217	3,565	No
McNeill-Live Oak	36	70	7	475,000	169,654	6,786	2,423	24,236	305,346	No
Mercedes-Hidalgo	28	450	5	2,000,000	79,047	4,445	175	15,809	1,920,953	No
Midway-San Patricio	1	40	2	320,000	None	8,000	None	None	320,000	New
Minerva-Rockdale-Milam	196	4,250	617	4,250,000	3,289,429	1,000	774	5,531	960,571	Yes
Mirando City-Webb	189	1,405	277	9,000,000	8,594,049	6,428	6,140	31,025	405,951	Yes
Mirando Valley, Zapata	196	140	30	675,000	633,508	4,821	4,525	21,116	41,492	Yes
Mission-Bexar	372	200	33	68,875	68,875	345	345	2,087	None	Depleted
Moca-Webb	56	80	9	880,000	596,483	11,000	7,456	66,276	283,517	Yes
Mount Lucas-Live Oak	76	320	13	1,160,000	214,370	3,625	669	16,490	845,630	Yes
Normanna-Bee	84	40	4	65,000	39,363	1,625	984	9,840	25,637	Yes
North Dale, Bastrop	58	340	22	840,000	432,622	2,475	1,273	19,664	407,378	Yes
North Lucas-Live Oak	27	120	2	240,000	32,979	2,000	2,748	16,489	207,091	No
North Pettus-Karnes	84	860	95	8,500,000	1,956,652	9,884	2,275	20,596	6,543,348	No
North Sweden-Duval	3	500	13	8,500,000	None	17,000	None	None	8,500,000	New
Oakville-Live Oak	10	30	3	120,000	310	4,000	10	100	119,690	New
O'Connor-Refugio	67	140	14	1,260,000	341,405	9,000	2,438	24,380	918,595	Yes
Ottine-Gonzalez	102	10	1	24,635	24,635	2,463	2,463	24,635	None	Depleted
Palangana-Duval	109	40	5	75,000	9,846	1,875	246	1,969	65,154	No
Pearsall-Frio	31	2,000	16	22,500,000	391,710	11,250	195	24,482	22,108,290	No
Peters-Duval	38	120	8	840,000	24,395	7,000	203	3,049	815,605	No
Pettus-Bee [10]	91	755	78	9,850,000	7,970,842	13,040	10,626	121,800	1,879,158	Yes
Piedra Lumbre-Duval	22	450	40	4,050,000	197,418	9,000	438	4,935	3,852,582	No
Piedra Pintas-Duval	384	120	25	150,000	143,178	1,250	1,193	5,725	6,822	No
Placedo, Victoria	27	1,620	147	29,500,000	1,504,478	18,210	928	10,234	27,995,522	No
Plummer-Bee	7	40	5	360,000	None	9,000	None	None	360,000	New
Plymouth-San Patricio	27	2,350	133	42,500,000	3,958,211	18,084	1,680	29,761	38,541,789	No
Port Lavaca-Calhoun	45	220	11	1,900,000	362,866	8,636	1,649	32,897	1,537,134	Yes
Premont-Jim Wells	50	250	24	1,250,000	8,428	5,000	33	351	1,241,572	Yes
Rancho Solo-Duval	12	60	5	360,000	None	6,000	None	None	540,000	New
Randado-Jim Hogg	134	765	176	4,750,000	4,365,534	6,091	5,706	24,800	384,466	Yes
Ray-Bee	27	480	56	3,850,000	933,337	8,020	1,923	15,774	2,916,663	Yes
Refugio-Refugio [11]	119	3,680	355	48,500,000	32,966,884	13,043	8,958	92,864	15,533,116	Yes
Ricaby-Starr	4	20	2	120,000	None	6,000	None	None	120,000	New
Rio Grande City-Starr	61	140	30	560,000	237,880	4,000	1,698	7,929	322,120	No
Roma-Starr	118	20	1	20,000	9,217	1,000	460	9,217	10,783	No
Rutledge-Bee	26	15	2	24,500	16,903	1,633	1,130	8,451	7,597	Yes
Salt Flats-Caldwell	110	1,050	343	40,000,000	35,260,798	38,095	33,580	102,800	4,739,202	Yes
Samfordyce, Hidalgo	34	1,240	189	22,500,000	3,211,118	18,145	2,264	16,990	18,288,882	No
Sandia-Jim Wells	24	80	3	640,000	None	8,000	None	None	640,000	New
Sarnosa-Duval	62	590	47	3,775,000	1,530,548	6,400	2,594	32,564	2,244,452	Yes
Saxet-Nueces	84	5,280	521	71,500,000	8,504,964	13,541	1,610	16,324	62,995,036	No
Saxet Heights-Nueces	20	1,080	232	6,500,000	2,236,557	6,018	2,096	9,640	4,263,443	Yes
Schimmel-Batts-Bastrop	73	30	3	15,000	5,782	500	193	1,927	9,218	Yes
Seven Sisters-Duval	26	3,840	400	44,000,000	2,082,440	11,459	542	5,206	42,917,560	No
Sinton-San Patricio	38	120	6	600,000	60,867	5,000	507	10,144	539,133	No
Slick-Goliad	88	50	3	250,000	69,270	5,000	1,385	13,090	180,930	No
Sal Mar-Guadalupe	61	20	1	20,000	10,750	1,000	537	10,750	9,250	No
Somerset-Atascosa	318	11,390	1,180	12,500,000	10,428,015	1,097	933	8,837	2,071,985	Yes
South Calliham-McMullen	2	20	2	80,000	None	4,000	None	None	80,000	New
South Darst Creek-Guadalupe	23	140	26	600,000	142,240	4,285	1,016	5,470	457,760	No
South Ricaby-Starr	1	30	4	300,000	None	10,000	None	None	300,000	New
S. R. C.-Duval [12]	82	160	16	650,000	268,564	4,062	1,678	16,785	481,436	Yes
Staples-Guadalupe	22	20	2	1,785	1,785	89	89	892	None	Depleted
Stratton-Nueces	2	20	1	100,000	None	5,000	None	None	100,000	New
Strauch-Bee	4	30	2	150,000	None	5,000	None	None	150,000	New
Sweden-Duval	6	60	3	500,000	None	8,333	None	None	500,000	New
Taft-San Patricio	19	440	56	10,000,000	359,802	22,727	817	6,425	9,640,198	No
Thomas-Lockhart-Duval	3	20	1	100,000	None	5,000	None	None	100,000	New
Tomoconnor-Refugio	36	3,640	136	125,000,000	1,596,798	34,200	438	11,741	123,403,202	No
Thrall-Williamson	208	620	192	2,100,000	1,851,489	3,389	2,986	9,643	248,511	Yes
Tuleta-Bee	60	90	10	150,000	146,500	1,666	1,628	14,650	3,500	Yes
Vanderbilt-Jackson	38	20	1	160,000	100,053	8,000	5,002	100,053	59,047	Yes
Van Ormy-Bexar [13]	73	860	80	500,000	55,282	581	64	691	444,718	No
Voss-Bee	13	70	7	550,000	4,403	7,857	63	629	545,497	No
Weser-Goliad	9	20	1	10,000	2,510	500	251	2,510	7,490	New
West Cole-Webb	122	420	87	4,000,000	3,130,320	9,524	7,453	35,980	869,680	Yes
West Tuleta-Bee	37	920	92	6,250,000	1,246,637	6,793	1,355	13,550	5,003,363	Yes
White Point-San Patricio	69	60	4	120,000	77,133	2,000	1,285	19,283	42,867	No
Yost-Bastrop	103	150	26	1,100,000	874,313	7,333	5,829	33,627	126,687	Yes
Yturria-Southton-Bexar	162	850	120	680,000	561,734	800	660	4,681	118,266	Yes
Zoboroski-Guadalupe	72	180	19	800,000	41,774	4,444	232	2,198	758,226	No

(1) Includes South Agua Dulce. (2) Includes North Cedar Creek. (3) Includes South Clara Driscoll. (4) Includes Lone Oak. (5) Includes Ignacio. (6) Includes South Hoffman. (7) Includes Taylor. (8) Includes North Jacob. (9) Includes Manda. (10) Includes Townsite-Southwest & Cosden. (11) Includes. Fox. (12) Includes Charamousca. (13) Includes Macdonna.



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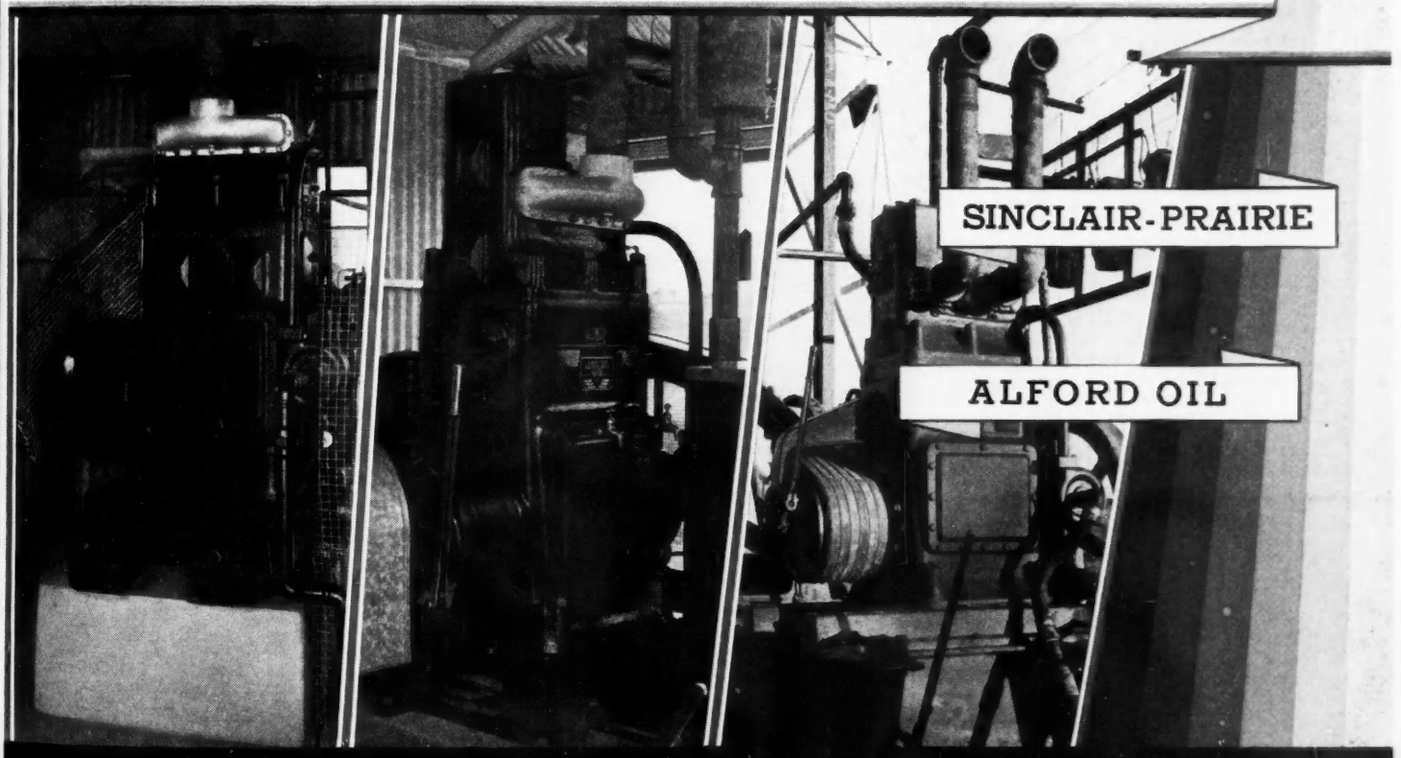

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Engineering Progress

RAISING THE VALUE OF SOUTH TEXAS

By EARL S. POST,
Staff Writer

PROGRESS in both production and drilling engineering is exemplified by present day South Texas operating practices. With production ranging from shallow depths to below 8000 feet, and formations embracing everything from the most recent to the Ordovician, it is evident that the methods of development must vary greatly.

This variance in development program, linked with a period of rapid progress, is of vital importance to the industry generally. Many South Texas fields have become proving grounds for numerous theories, with the result being the establishment of important new reserves heretofore overlooked.

Millions of barrels of potential reserves in South Texas have been ignored for years, because the method of recovering the crude was so inadequate at the time that the fields were looked upon as being non-commercial.

Austin Chalk Revived by Acid

The above is particularly true of Austin chalk, now one of the major producing zones of three prolific counties — Bastrop, Caldwell and Guadalupe. Such fields as Branyon, Buchanan, Luling, Dunlap have their discovery wells dating back as far as 15 years ago. In addition, numerous wildcats on known structures have shown sufficient oil to make producers in the Austin chalk. However, actual development was limited until two years ago. Since that time, rapid strides have been made in devising methods of bringing the oil to the surface.

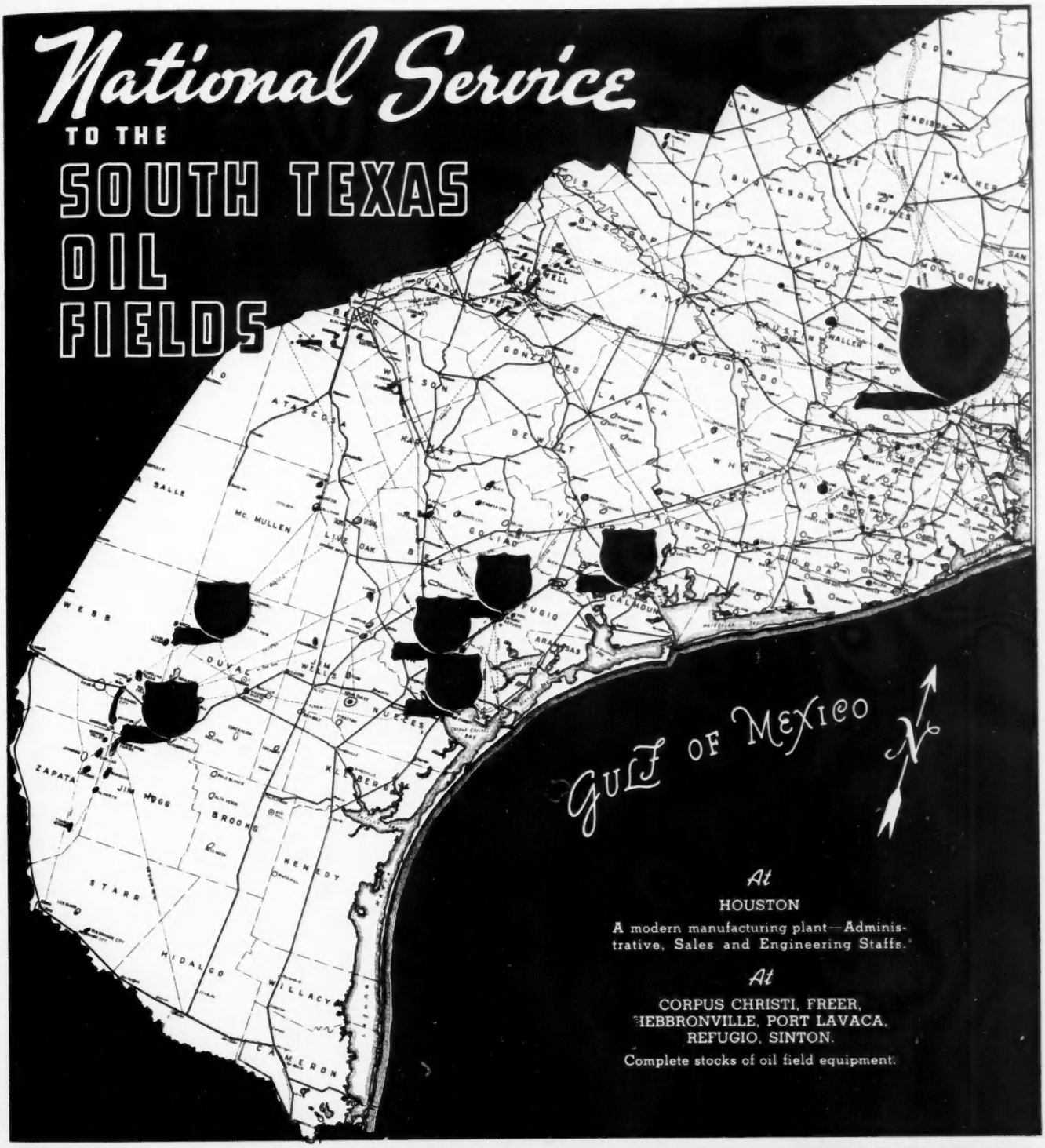
Austin chalk, in the majority of the producing areas, carries a section of saturation ranging from about 30 to several hundred feet in thickness. When encountered at the fault plane, the chalk generally is well fractured and some times sufficiently broken, or in large enough crevices, to provide large natural flowing wells. This faulted, fractured zone, however, is very narrow, in most cases one to three locations wide.

The real problem is in developing adequate production in the areas away from the fault plane, where the chalk carries considerable oil saturation, but the hard, tight formation will not give it up freely.

One of the favorite methods of drilling is to core carefully for the top of the chalk. Immediately upon determining its point, casing is set and cemented. When plugs are drilled, the well is carried ahead to near the base of the chalk. In some instances, into the Buda limestone. The test immediately is unloaded of the fluid, whether it be water or mud, and a production test made. It is produced for several days to further clean any undesired fluid from the hole. Following this, an acid treatment, generally 4000 gallons, for a short period is injected into the formation. The pressure is built up rather high as soon as the acid solution is put into the hole, and the pressure is maintained at the top of of the hole. If the acid produces the desired results, the pressure will drop quite quickly, indicating the fluid has pushed its way into the formation, and possibly opening the way to

ABUNDANT use of coring detecting previously overlooked sand lenses. Formations heretofore uncommercial now pay off, due to improved treating practices. Much progress in gas conservation, including elimination of wastage and in maintaining pressures. Drilling has become deeper and faster through adoption of new methods.

National Service TO THE SOUTH TEXAS OIL FIELDS



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fractured areas several hundred feet from the drill hole. The acid, however, is left a few hours at the most, so that it cannot mix with the formation, and convert it into a paste-like sediment, which would wall the hole as if cemented.

Some of the wells have not produced the desired results with acid alone, due to the tightness of the formation. In several cases, large shots of nitro, up to 350 quarts, have been used to tear the formation and create a cavity which then is acidized. On other occasions, gun perforator shots have been put into the formation to provide a channel for the acid treatment.

Hundreds of wells have been drilled during the past few months along the trend of these Austin chalk structures with apparently excellent results. This work, can be attributed definitely to the improved types and methods of formation treating.

Edwards limestone, likewise, is receiving an important play through this area. It has been found that some of the condemned structures likely could have produced had the wells been drilled only a few inches into the limestone. New wells are now being sunk on these known structures, setting pipe after reaching the top of the formation. An acid treatment of 100 to 350 gallons is used to merely clean the hole of cement, etc., with the result being fine producers.

Coring Discovers New Sands

Like the Cretaceous area, the Miocene and Oligocene zone, embracing the area along the Texas Gulf Coast, has received vast benefits at the hands of the engineers. Records show that scores of new producing sands are being uncovered in already producing structures. In many cases, these sands are shallower or about the same level as already producing horizons and have been drilled, but not logged by previous operations. Saxet field, Nueces County, one of the best examples, has fully a dozen oil sands between 3900 and 5000 feet. The sector formerly was considered to have only three zones between this level.

Many of the wells drilled on key locations in this field have been cored solidly from near the top of the ground to the total depth. Electric formation logging devices also have been run and well data from drillers' logs plotted carefully. The result is that sand maps have been developed in each zone appearing to have possibilities of being a new lens. While these lenses may be of little consequence individually, their recovery combined with several other thin sand zones at upper or lower levels create a profitable reserve. It is likely that no single sand would provide sufficient recovery to warrant drilling to it alone. By drilling through the section, setting casing on the bottom sand, producing it until depleted, plugging back and perforating in the upper levels, the operation becomes highly profitable.

The above operation brings to light several other advancements, each of which enabled such a development. Proper cementing methods, including stage and squeeze jobs, plus gun perforation makes it possible to take the production in stages.

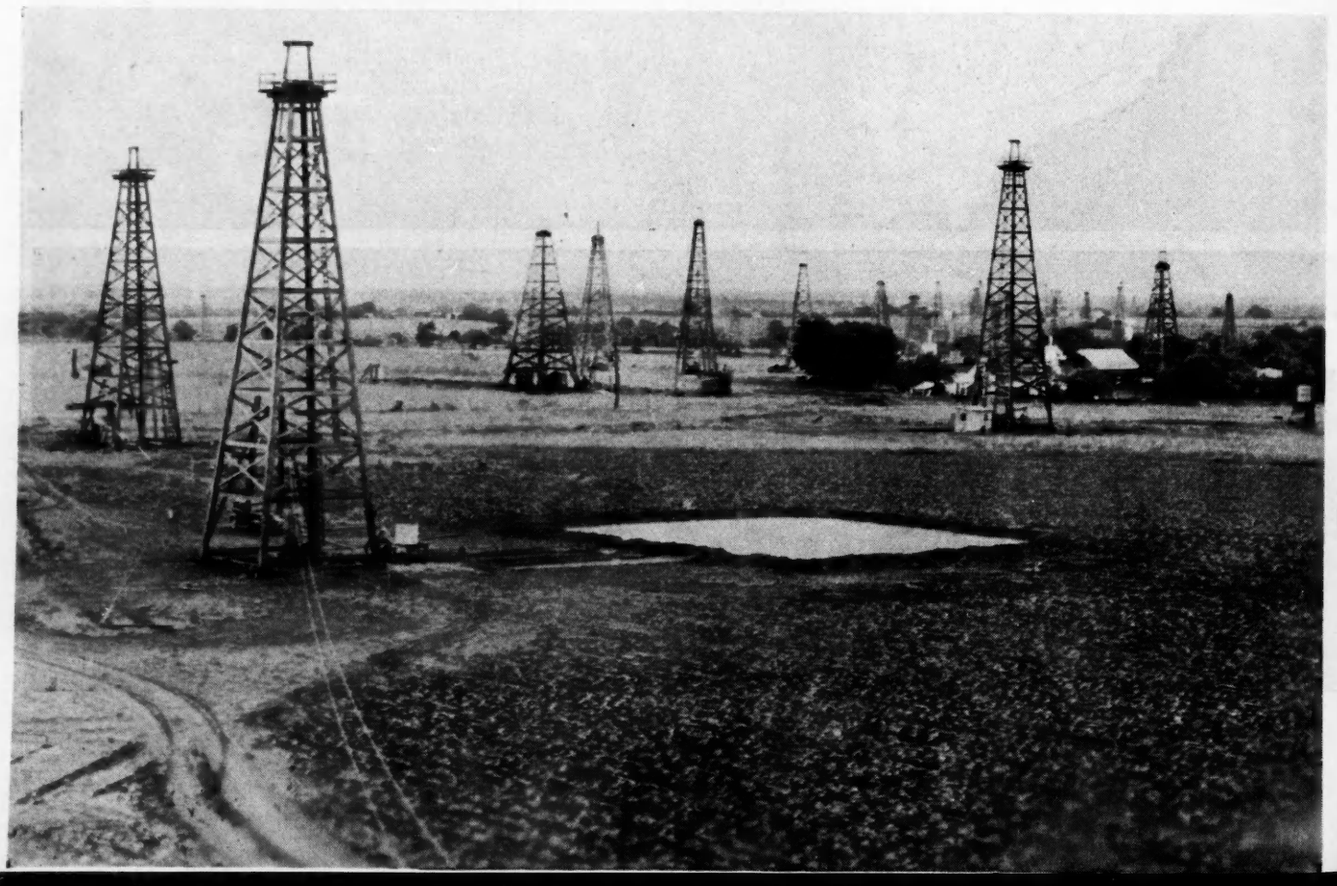
The Saxet field is only one of many along the South Texas Gulf Coast in which the display of engineering skill is great—and the results appreciable.

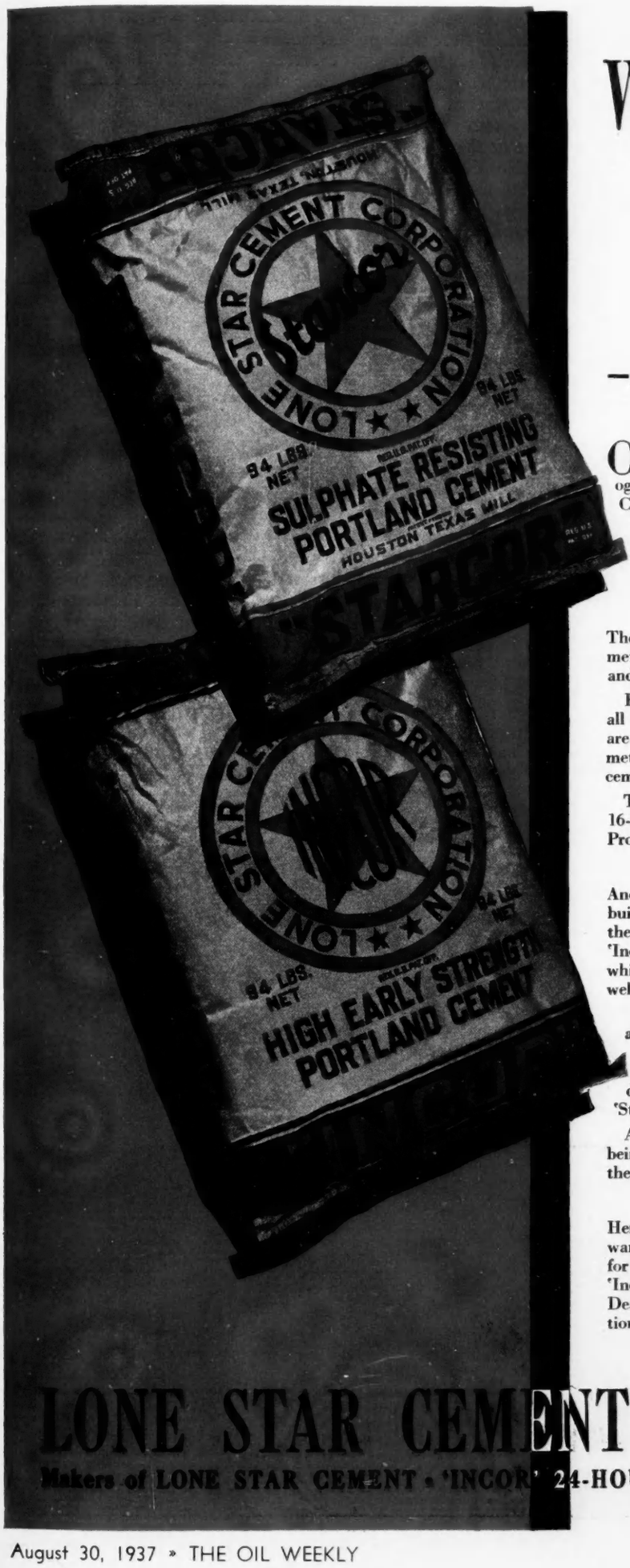
Wet Gas Salvaged

Another outstanding feature, not yet universal in all fields, is salvaging of wet gas from the high gravity oil wells. The residue gas from these tests is piped through a central gathering system to a natural gasoline plant, converted into fluid, which in turn is blended with the crude produced from the wells. The residue gas from the plant in the Saxet field is used for manufacturing purposes, thus eliminating any waste. Several other fields are at this time either operating such plants or have them under construction. Carbon black plant is expected to make its entrance into the Saxet field shortly to consume the residue gas from wells producing a product without gasoline content.

Tom O'connor field, of Refugio County, likely is the model oil field of South Texas. The spacing of wells on 20- to 25-acre locations has been followed carefully. Except for a few "hot corners" or most irregu-

A general view of the Branyon field of Caldwell County, which is one of Southwest Texas' Austin Chalk producing areas that has been revived by new formation treating practices.





WHAT OIL MEN ASKED FOR

TWO PORTLAND CEMENTS —BOTH MADE FOR OIL WELLS

OIL-WELL work presents special problems which all-purpose cements were not designed to meet. Recognizing this fact, more than a decade ago Lone Star Cement Research Laboratories perfected 'Incor' 24-Hour Cement, which sets normally but hardens in one-fifth the usual time—the high early strength cement with an outstanding record of successful results in oil-well work.

Meeting Oil-Well Needs

Then, closely following oil-field developments, Lone Star met the newer problems presented as wells became deeper and hotter. And 'Starcor' Cement was perfected.

Both 'Starcor' and 'Incor' are true Portland cements, in all that the term implies. No admixtures or adulterants are used or needed. By carefully perfected processing methods, the needed special properties are built into the cement itself.

Thus, both 'Starcor' and 'Incor' pump easily in 15- or 16-lb. slurries. Stay gel-like to resist mud contamination. Provide a stronger, denser shut off.

Controlled Setting Time

And both cements have controlled setting time—an in-built safety factor to allow the slurry to get to the bottom of the well, with ample leeway for unforeseen contingencies. 'Incor' is "timed" for cementing wells of medium depth, while 'Starcor' is timed to set slowly in even the deepest wells, in the presence of high temperatures.

Then, while timed to set normally, both 'Starcor' and 'Incor' harden rapidly and thoroughly, once they are in place, and provide quick protection against gas agitation and ground-water seepage. You can drill out in 1 to 2 days with 'Incor'—2 to 3 days with 'Starcor'.

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larly shaped tracts, these tests are lined in perfect rows. The field's main sands are at 5900 feet, although both gas and oil horizons are found at 4900, 5200, 5500, 5700, 5800 and 5900 feet. Wells in most cases are cored carefully in the several sand zones, when completed in the bottom sand by either setting in the horizon or through it. Production from the field is almost entirely from the 5900-foot sand at this time, but at the depletion of that horizon, upper levels will be produced. By all the companies following this method of operation, multiple wells are not required through offsetting. Neither is one sand drained to the detriment of other leaseholders. The contrast is the Saxet area, where as many as four wells are drilled on a single unit, each being completed in separate horizons.

Deeper Drilling a Trend

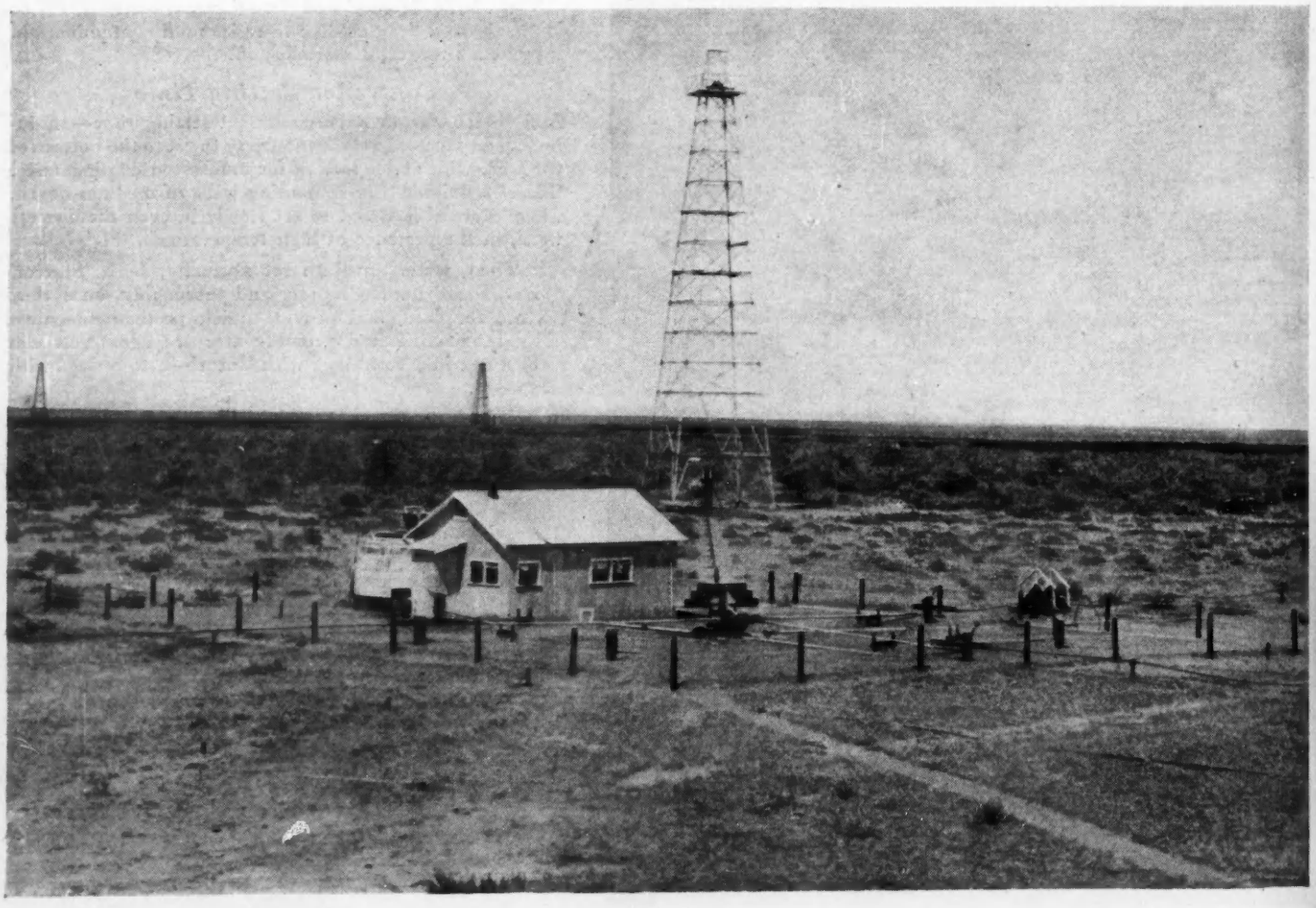
The definite trend in drilling has been toward deeper levels, especially in wildcats. Wherein companies control fairly large blocks, wildcat wells will pass through several sands adequate to provide commercial production in order that the definite value of the discovery can be determined. This proves highly valuable in that it can be used to gauge the future development program. Wherein deeper sands are not likely, small casing generally is adequate to production.

An excellent illustration of another practice is Plymouth Oil Company's Welder lease in the Plymouth field of San Patricio County. This company has set 7⅝-inch casing in its 80 producing wells, the holes being adequate to be carried to deeper sands at such time as the present levels become non-commercial.

Faster drilling has been the order of the day in all fields. Every possible means of reducing time, and increasing efficiency has been resorted to. One idle period with the rig — cement time — is a loss that rapidly is being overcome. Edwin M. Jones' Ezzell Ranch project in McMullen County, likely sets the record for efficiency in this score. He uses a large rig on drilling 1500-foot holes. The test cores the sand within a few hours after surface plugs have been drilled. The sand is then tested, and the well drilled ahead a sufficient distance to enable setting the casing on bottom and having the pipe flush at the surface without using nipples. The cement then is pumped and the rig immediately skidded off location. A small outfit with a mast is then erected over the location. The plugs then are drilled by the small rig, the well gun perforated, and completion effected. Instead of the rig being shut down 48 or 72 hours, it is on another location. Units of four locations on a 40-acre lease are drilled by skidding only the rig, boilers and such equipment being placed at the center of the unit.

The above method works perfectly in this case because of the comparative thinness of the sand underlaid by a shale body and no water.

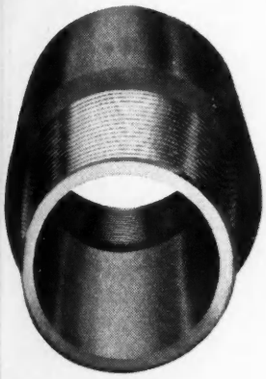
Mills Bennett Production Company has another method of drilling wells speedily in the Lopez field of Webb and Duval counties. Tests were rushed down to the sand with a small gasoline rig, equipped with a heavy pump unit. Liner and casing was made up in one string, separated by a baffle plate. The pipe was landed on bottom and cemented through perforations just above the baffle plate. Within 12 to 24 hours after the cement had been pumped into the hole, the test was drilling out the plug and plate, following which all equipment was run into the hole, and rig skidded off. The well was quickly brought in through gas injection. The company was drilling



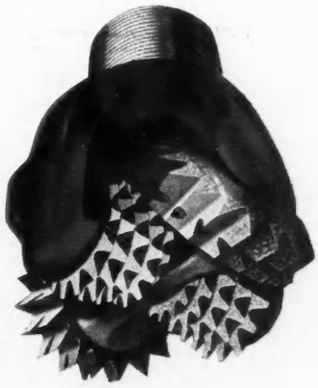
A scene in the Cole-Bruni field of Webb County, showing a lease belonging to Sun Oil Company.

Outstanding performane of Reed Tools

OIL MEN IN MAKING RECORDS *in* SOUTH TEXAS - GULF COAST



REED
TOOL JOINTS



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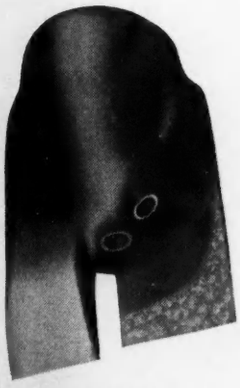

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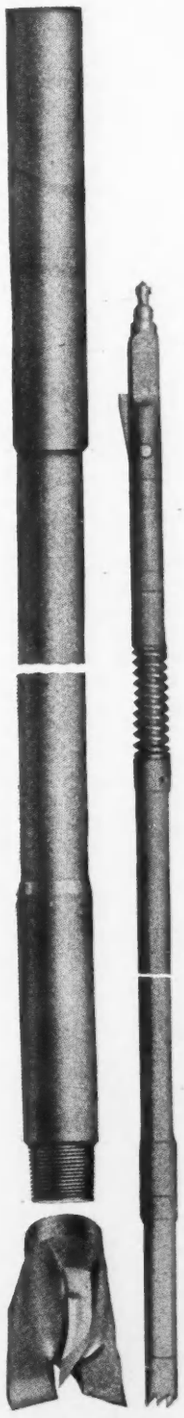

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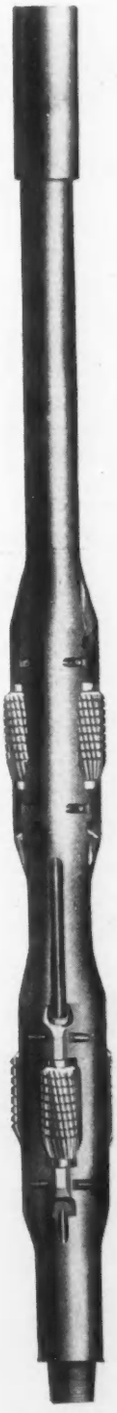
B-R WIRE LINE DRILLING
CORING BITS



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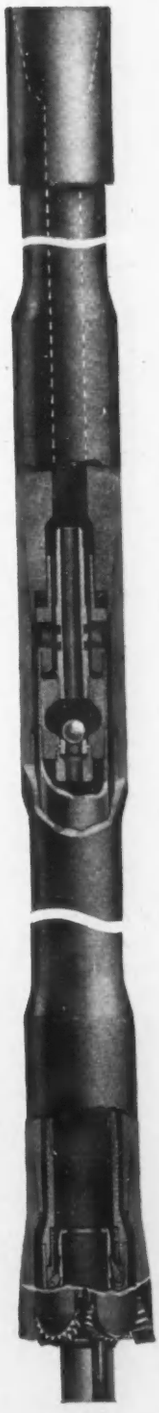

REED
KOR-KING
CORE DRILLS

REED
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REED ROLLER BIT COMPANY

and completing an average of six wells per month with the single rig during the peak of development in this field.

Drilling in virtually every case is done with rotary, the trend being toward speedier rotaries and more powerful pumps. Even in the shallower areas, tremendous power plants are successfully and economically operated.

Coring and testing efforts, likewise, have been studied and materially improved with the result being the establishment of numerous new producing zones in virtually every field. Records show that there is an average of at least two separate producing horizons in every field in South Texas. In addition, numerous pools have a series of sand lenses in a single group, these lenses being classified as a single horizon.

In the production of highly lenticular zones, coring and testing becomes a most important phase of operation. Due to their erratic condition, gas/oil and oil/water contacts are most irregular. It is necessary in many cases to case off portions of the producing zone to cut off upper sand stringers carrying water in order to obtain the oil production below. Such problems frequently are overcome through setting a full string of pipe through the zone and gun perforating in the most likely oil zone. This especially is true in such areas as Saxet Heights, where gas-oil ratio, as well as water intrusion become a problem.

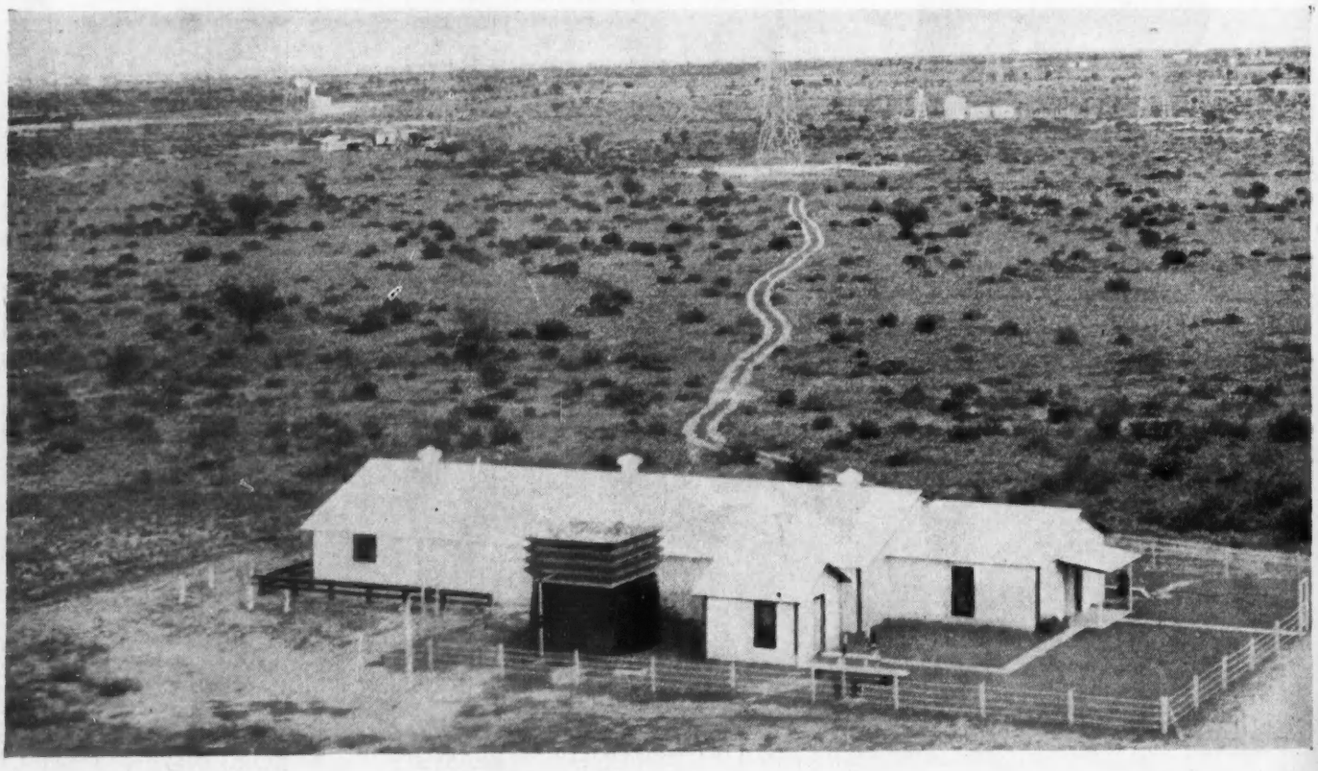
Increased Recovery

Repressuring has not made a great advancement in South Texas as yet. The two outstanding projects are Humble Oil & Refining Company's unit operation in the Hilbig field of Bastrop County and Magnolia Petroleum Company's program in the Cole-O'Hern district of Webb and Duval counties. The Humble project is apparently highly successful. Recovery figures show this 2500-foot Serpentine area to have the highest expected per acre recovery of any field in this formation. The plant was placed into operation almost immediately after the discovery of the field and has been running constantly. The residue gas from the widely spaced wells is converted to the formation to keep the reservoir pressure as near the original figure as possible.

Magnolia Petroleum Company has materially increased the expected recovery from its Cole-O'Hern properties through a recycling project. While information as to the success of the plant is lacking, it is known that a number of the pumping wells commenced flowing after the project was placed into operation. This project is probably the most attractively arranged in all South Texas. The wells are evenly spaced on 10-acre units, all wells have small, neatly designed well heads and flowing units, steel derricks, etc. Tank batteries are in units, rather than to single wells and gas/oil separators at each well are replaced by the unit separator equipment. The entire lease has been cleared of brush, and the area immediately surrounding each location has been cleaned, leveled and filled with sand. Combination of neatness and arrangement has proved both a labor saving and accident prevention feature.

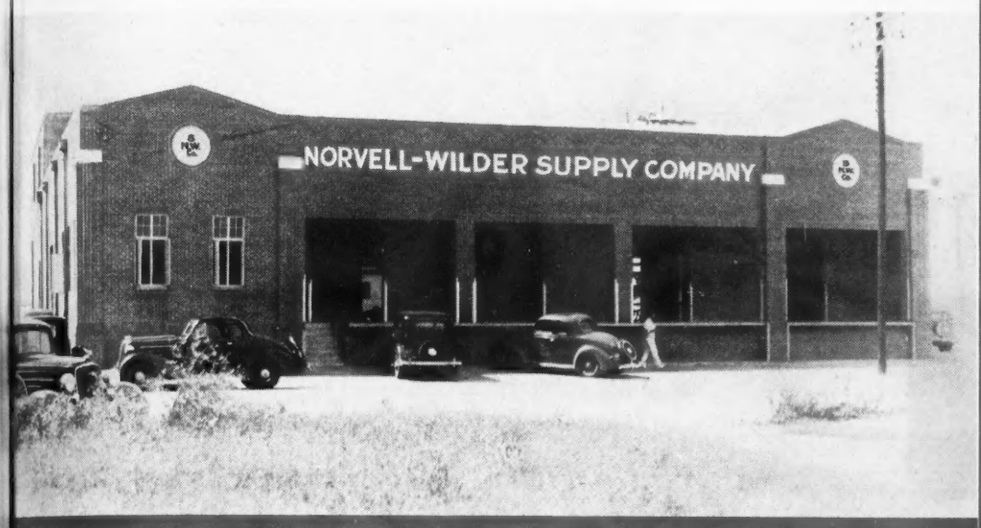
Many Twin Wells

Twin well operation has become a common practice in South Texas Gulf Coast fields, the Taft and Saxet fields being the major scene of such work. In Saxet, the first quadruplet wells ever drilled, are producing. The deepest twin wells in South Texas are in the McCampbell field, where wells are productive from both 6550 and 7100-foot sands. Efforts are made to overcome this practice of development, but small tracts, requiring offsets frequently make such drilling necessary.



Magnolia Petroleum Company's O'Hern properties in the Cole field, Webb County, are considered among the finest lease layouts in Southwest Texas. Note that the lease has been carefully cleared. The compressor station shown in the foreground compresses waste gas before returning to the producing formation.

NORVELL-WILDER'S WAREHOUSE at CORPUS CHRISTI



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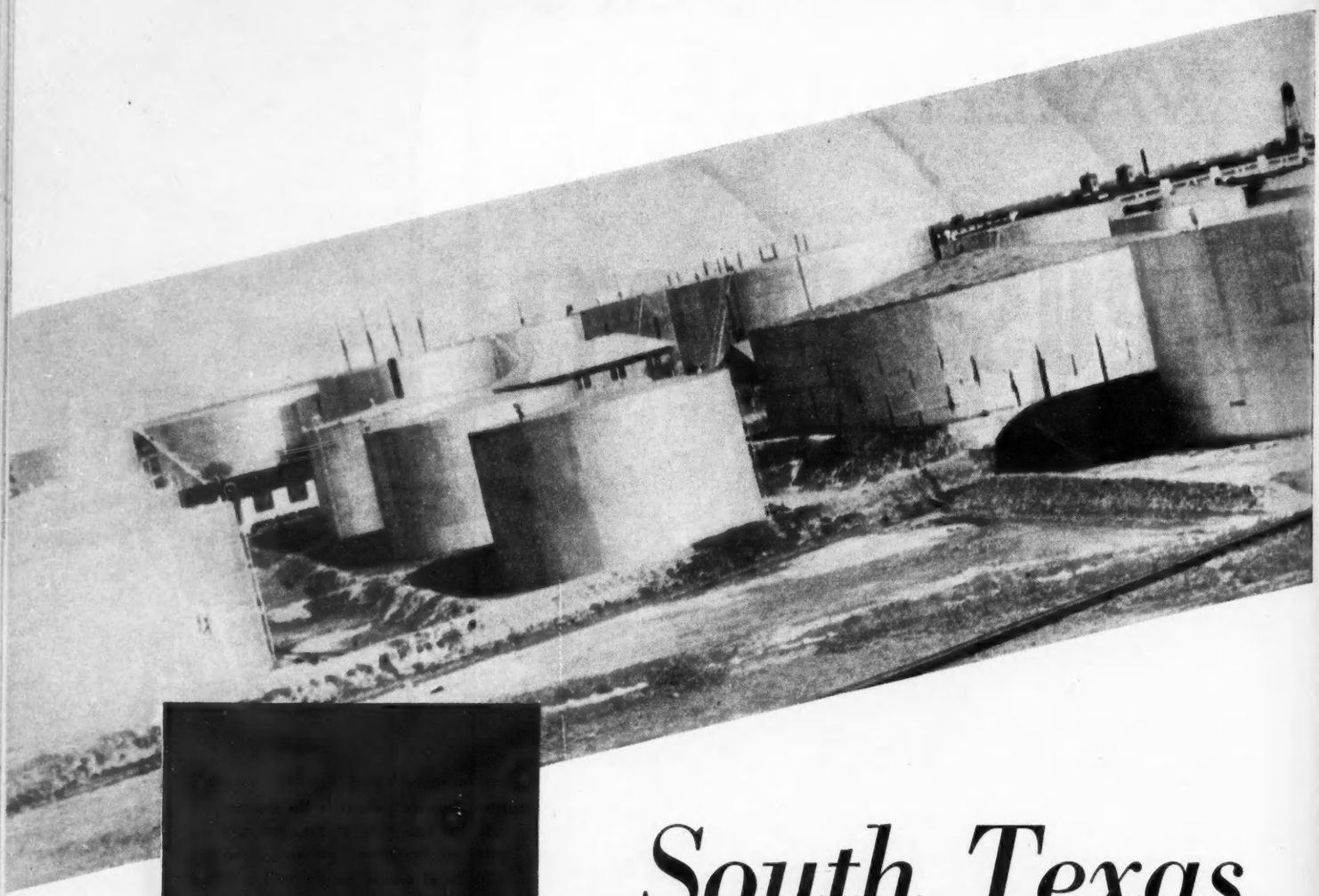


South Texas Oil Outlet Facilities Enlarged

By EARL S. POST,
Staff Writer

INCREASING production from South Texas fields, and the region's expanding crude reserves have prompted the construction of a network of facilities for handling the output. New pipe lines, refineries and storage systems, as well as enlargement of shipping ports have been built on a major scale.

Past Year Active

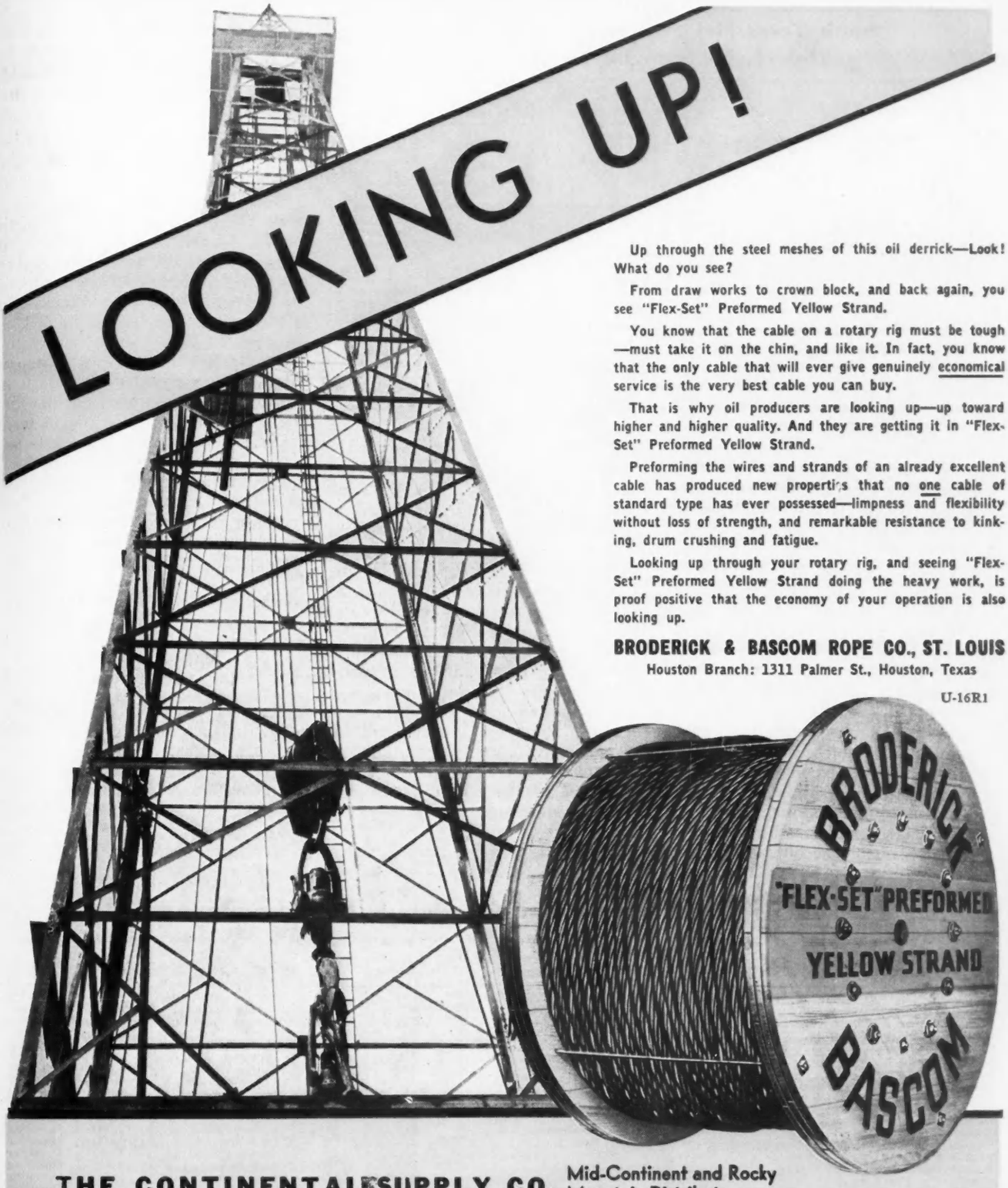
During the past year (ending July 1, 1937) there were 22 major storage construction jobs that involved 125 tanks with a capacity of 4,343,410 barrels. These figures include work on tanks of 20,000 barrels or larger located on trunk pipe line or on major storage systems. The amount of field gathering system storage, if it were known, would materially increase the total.

New refinery projects the past year increased facilities for processing crude by 31,900 barrels daily. There were 12 new plants built or under construction, most of which were located on tide water.

Pipe line facilities, including only complete outlets to fields, amounted to 589½ miles during the year. This activity was well scattered throughout the area. The pipe lines constructed or being built have a capacity of 188,600 barrels daily, which added to those already in operation gives South Texas an outlet for much more crude than it is currently producing.

But, such expansion, required by

LOOKING UP!



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South Texas Major Storage Construction July 1, 1936, to July 1, 1937

COMPANY	Location	Number Tanks	Capacity (Barrels)	Status
Amsco Refining Corp.	Corpus Christi	13	84,830	Completed
Barnsdall Oil Co. (Pipe Line and Terminal)	Corpus Christi	1	80,000	Completed
Barnsdall Oil Co.	Corpus Christi	5	350,000	Contracted
Barnsdall Refining Corp.	Corpus Christi	7	410,000	Constructing
Coastal Refining, Inc.	Port Isabel	23	255,580	Completed
Coastal Refining, Inc.	Port Isabel	1	80,000	Constructing
Corpus Christi Refining Co.	Corpus Christi	16	465,000	Completed
Crown Central Trans. Corp.	Corpus Christi	2	110,000	Constructing
Crown Central Trans. Corp.	Saxet	2	20,000	Constructing
Crude Oil Terminal Co.	Corpus Christi	4	295,000	Completed
General American Tank, Terminal & Storage Co.	Corpus Christi	3	130,000	Completed
Humble Oil & Refining Co.	Ingleside	6	480,000	Constructing
Humble Oil & Refining Co.	Harbor Island	5	442,000	Contracted
Pontiac Pipe Line & Export Co.	Corpus Christi	3	120,000	Completed
Potter Pipe Line Co.	Corpus Christi	9	245,000	Completed
Republic Pipe Line Co.	Benavides	2	20,000	Completed
Republic Pipe Line Co.	Corpus Christi	2	90,000	Completed
Republic Pipe Line Co.	Corpus Christi	1	80,000	Contracted
Republic Pipe Line Co.	Bloomington	1	10,000	Completed
Southern Pipe Line Corp.	Corpus Christi	3	166,000	Completed
Terminal Refining Corp.	Corpus Christi	14	250,000	Completed
The Texas Co.	Corpus Christi	2	160,000	Completed

TOTAL—125 tanks with a capacity of 4,343,410 barrels.

field development, has placed no detriment on the crude or refined oil market. South Texas' oils have in virtually every case been well sought after by both independent and major purchasers. Availability to market, quality of the crude, reasonable production allowables, and diversified ownership, are combined to make this a choice producing area of the nation.

Crude Desirable

The above is well borne out in the accompanying tables of construction in these various branches. A large portion of the work has been by independent companies, including both those of large and small classes.

What probably accounts for such a trend is the type of crude and refined market and product. At least one-half of the crude produced in South Texas ranges in gravity from 19 to 26 and is commonly referred to as "Mirando Type Crude." This oil is adapted to Diesel engine operation in most cases in its crude state. It is superb for fuel oil. In addition, through processing, its lubricating qualities are ideal and its gasoline content, while reasonably low, is a high anti-knock fluid. It can be seen, therefore, that the market will be rather varied. Single operation refining plants can break the low gravity crude into furnace oil, gasoline, naphtha, etc., and can find ready market.

The higher gravity crudes, ranging up to 61 and 62 degrees in some cases, prove unusually desirable for skimming. In several of the fields, the residue gas, heretofore potted into the area, is converted to gasoline through local plants and the two fluids blended to provide a highly marketable and high priced product.

This type of sweet crude finds its way into the general markets of the world. At this time the majority of the nations of the world have tankers on regular schedule to Corpus Christi, Harbor Island, Port Aransas, Inglesides or Port Isabel, to pick up cargoes of the above crudes and partly refined oils. The European situation has shown a definite trend toward Diesel operated engines during the past several years, to materially strain the supply of this particular product. On the other hand, the French government through its private American contracts, has been handling a tremendous amount of high gravity crude, near gasoline in quality, through the port of Corpus Christi. These foreign demands, therefore, handle the increased output of crude oil in a most adequate manner.

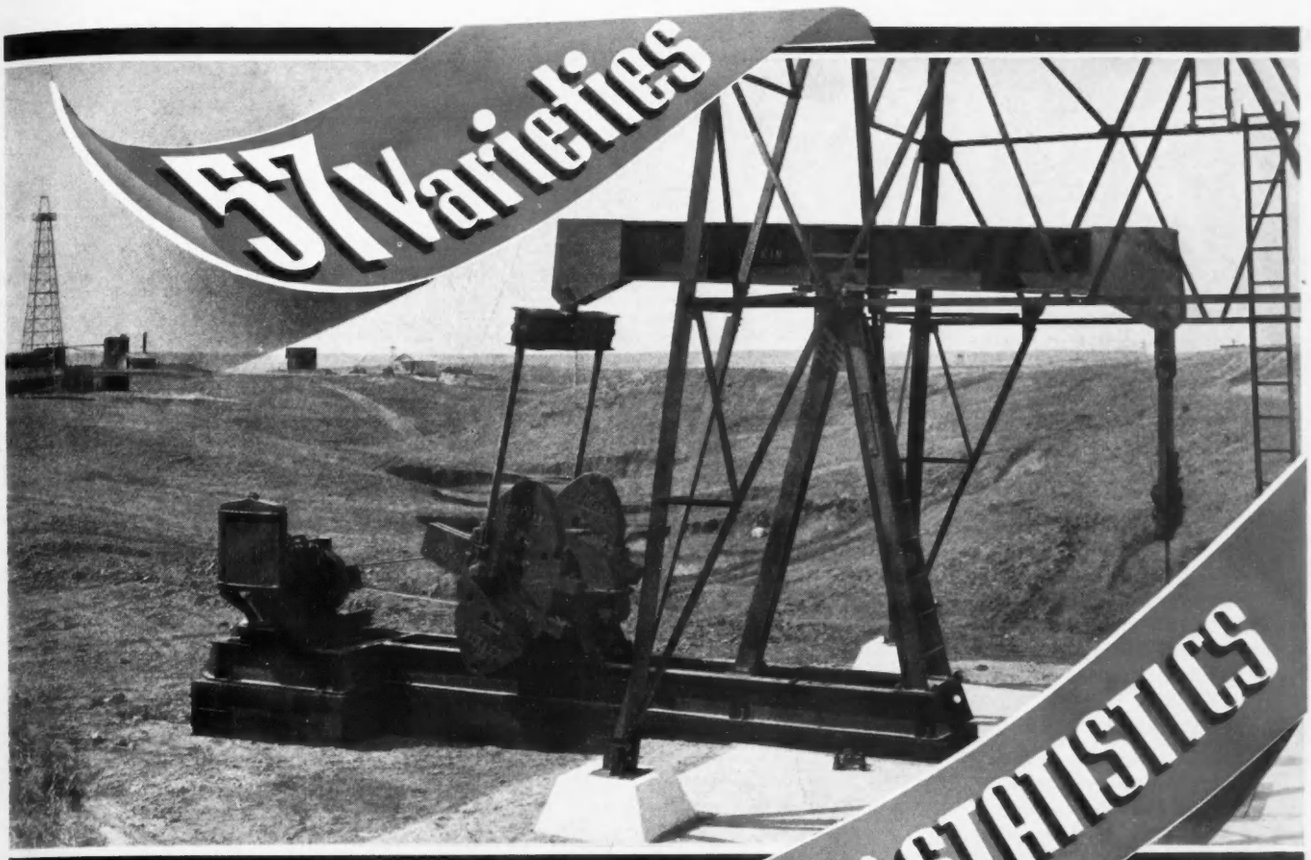
Refineries to Expand

With this highly desirable and adequate market, another development comes to light: that is the refinery. Until a couple of years ago South Texas refinery business was virtually nil. A few small plants for local consumption, in addition to two fairly large projects at Inglesides and

South Texas Pipe Line Construction, July 1, 1936, to July 1, 1937

COMPANY	Origin	Terminus	Size (Inches)	Length (Miles)	Ultimate Outlet	Capacity (Barrels)	Status
Amsco Pipe Line Co.	Clarkwood	Corpus Christi	5½	10	Corpus Christi	6,000	Operating
Barnsdall Oil Co.	Placedo	Corpus Christi	6	90	Corpus Christi	12,000	Building
Barnsdall Pipe Line Co.	Placedo	Port Lavaca	3 & 6	13	Corpus Christi	2,000	Operating
Crown Central Trans. Corp.	Clarkwood	Corpus Christi	4	12	Corpus Christi	8,000	Building
Crouch Pipe Line Co.	Zoboroski	Darst Creek	2	7½	Hull	1,000	Operating
D. Davenport	Central Starr	Port Isabel	?	85	Port Isabel	?	Proposed
Driscoll Pipe Line Co.	C. Driscoll	Robstown	4	10	Corpus Christi	4,000	Operating
Gravis Pipe Line	N. Sweden	Benavides	4	3	Corpus Christi	2,500	Operating
Grayberg Oil	Zoboroski	Darst Creek	2½	5½	Bay Town	1,000	Operating
Humble Pipe Line Co.	Flour Bluff	Viola	4 & 8	18½	Harbor Island	9,000	Operating
Humble Pipe Line Co.	Pearsall	Lytle	6⅝	32	Inglesides	7,500	Operating
Humble Pipe Line Co.	Heyser	Tomoconnor	6	21½	Harbor Island	12,000	Operating
Humble Pipe Line Co.	Placedo	Heyser	4	5	Inglesides	6,000	Operating
Humble Pipe Line Co.	Viola	Corpus Christi	6	12	Corpus Christi	4,100	Operating
Humble Pipe Line Co.	Viola	Inglesides	6	30	Inglesides	6,500	Operating
Humble Pipe Line Co.	Plymouth	Refugio Line	6	10	Inglesides	6,000	Operating
Humble Pipe Line Co.	N. Sweden	Benavides	4	4	Inglesides	6,000	Operating
Jim Wells Pipe Line	Premont	S. P. Railroad	4	6	Corpus Christi	4,000	Operating
Magnolia Pipe Line	Tilden	Corpus Christi	8	73	Corpus Christi	15,000	Operating
Nueces Pipe Line Co.	Bentonville	R.R.	4	5	Corpus Christi	3,000	Operating
Nueces Pipe Line Co.	Agua Dulce	Banquete	3½	9	Corpus Christi	2,000	Operating
Palmetto Oil Co.	Ricaby	Railroad	?	5	?	?	Proposed
Pontiac Pipe Line & Export Co.	Saxet Heights	Corpus Christi	4	6	Corpus Christi	4,000	Operating
Potter Pipe Line Co.	Saxet	Corpus Christi	6 & 8	10	Corpus Christi	4,000	Operating
Saxet Heights Pipe Line	Cole-O'Hern	Government Wells	4	34½	Corpus Christi	5,000	Building
Saxet Heights Pipe Line	Saxet Heights	Corpus Christi	4	12	Corpus Christi	6,000	Operating
Republic Oil Corp.	N. Sweden	Benavides	4	3	Corpus Christi	3,000	Operating
Republic Oil Corp.	Sweden	Sweden	4	3	Corpus Christi	3,000	Operating
Southern Pipe Line	Saxet	Corpus Christi	4½ to 6	9	Corpus Christi	10,000	Operating
Southern Pipe Line	Saxet	Corpus Christi	3½	8	Corpus Christi	3,500	Operating
Standard of Texas	Alta Mesa	Falfurrias	10	10	Inglesides	12,000	Building
Texas Pipe Line Co.	Ganado	Mauritz	6	5	Port Arthur	4,000	Operating
Texas Pipe Line Co.	Saxet	Corpus Christi	8	10	Corpus Christi	6,000	Operating
Texita Pipe Line Co.	Bentonville	Crude Oil Line	5½	5	Corpus Christi	6,500	Operating
Texas Pipe Line Co.	London	Clarkwood	6	7	Corpus Christi	4,000	Building

TOTAL—589½ miles of line with capacity of 188,600 barrels daily.



Speaking of STATISTICS

THERE were fifty-seven varieties of Pumping Units on the market (including many "make-shift" arrangements for lifting oil) the last time the statisticians took time out to count them.

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Refinery Construction in South Texas
July 1, 1936, to July 1, 1937

NAME	Location	Type	Capacity, Bbls.	Type Crude Processed	Status
Amsco Refining Corp.	Corpus Christi	Skimming	4,000	Mirando	Operating
Barnsdall Oil Co.	Corpus Christi	Skimming and cracking	10,000	Placedo	Building
Coastal Refineries	Port Isabel	Stabilizer*	.....	Samfordyce	Operating
Corpus Christi Ref. Co.	Corpus Christi	Cracking and vapor recovery	5,000	Saxet area	Operating
Davis Refining Corp.	Corpus Christi	Skimming	1,500	Saxet Light	Operating
Manhattan Gasoline Co.	Plymouth	Low pressure absorption	200	Residue gas	Operating
Phoenix Refining Co.	Rio Grande City	Skimming	1,500	Starr	Operating
Refugio Refining Co.	La Blanca	Skimming	1,000	La Blanca	Building
Refugio Refining Co.	La Blanca	Absorption	200	La Blanca	Proposed
Southern Minerals Corp.	Saxet	Low pressure absorption	1,000	Residue gas	Operating
Southwestern Ref. Co.	Corpus Christi	Skimming	3,500	Saxet	Operating
Terminal Ref. Corp.	Corpus Christi	Skimming	4,000	Saxet Frio	Operating

TOTAL—Twelve plants built with combined operating capacity of 31,900 barrels daily.

Luling, accounted for the area's entire facilities. The new ports were constructed along the gulf coast, bringing trunk pipe lines, then refining businesses.

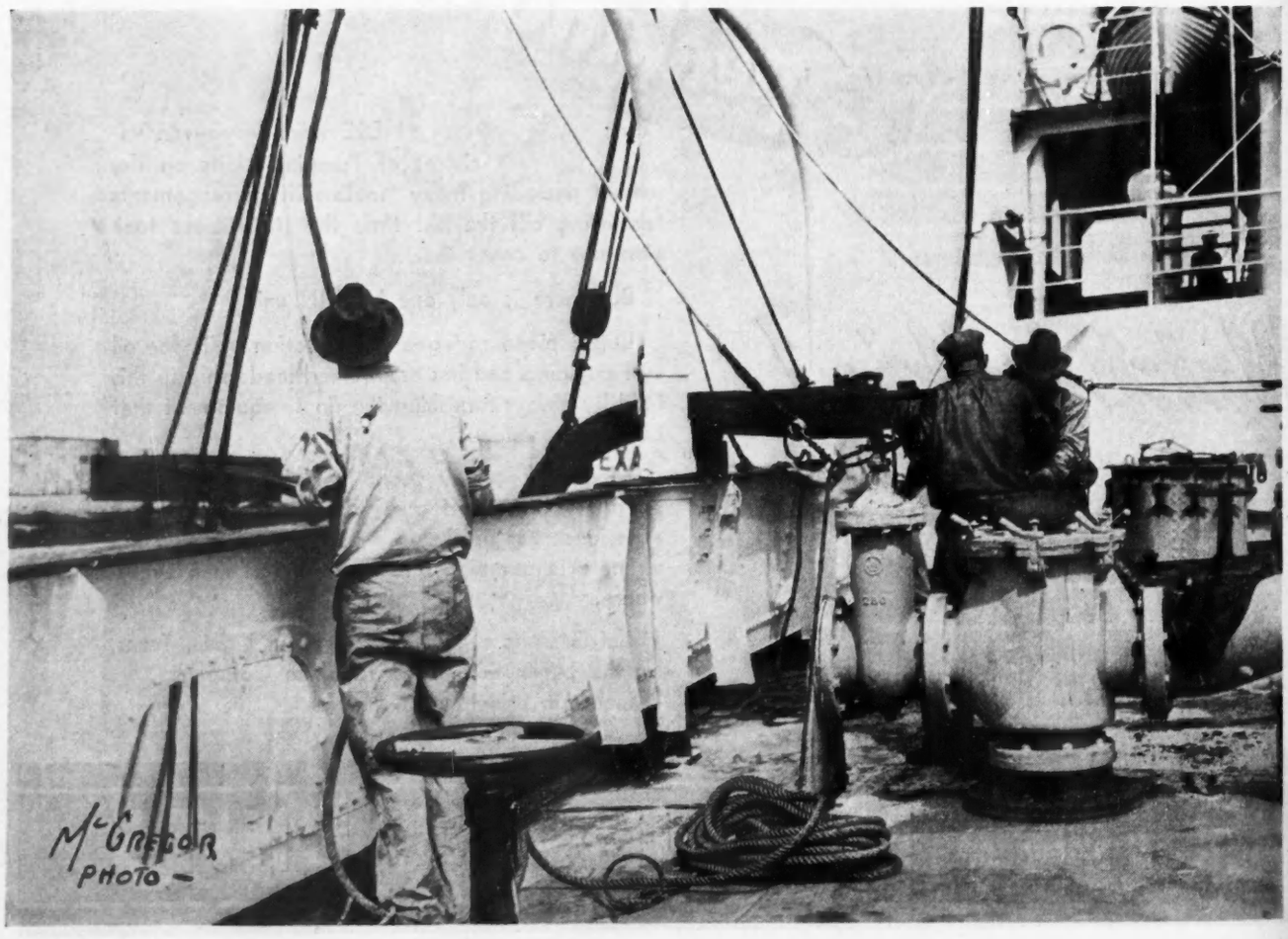
If the plants rumored to be constructed within the near future along these coastal channels materialize, the next year likely will see capacities for the entire district increased fully 50 percent. It seems to be a trend of centralization along deep water, as has been the case along other portions of the Gulf of Mexico during the past several years.

Corpus Christi's immediate port area is receiving the bulk of the new work, including refineries, pipe lines, crude oil terminals and storage. Six new refineries are being built or have just been completed on the channel. Other new refinery developments are shared by Port Isabel, Rio Grande City and La Blanca, each receiving one. Three new gasoline plants have been built or are underway, being at Saxet, Plymouth, and La Blanca fields.

Fifteen different concerns share in the major storage work, Humble Oil and Refining Company leading with 922,000 barrels, in the Harbor Island-Inglesides area. Barnsdall Oil Company is a close second with 840,000 barrels at Corpus Christi Ship Channel. Corpus Christi Refining Company's 465,000-barrel addition at Corpus Christi came third, while Coastal Refineries, Inc.'s work at Port Isabel amounted to 335,580 barrels.

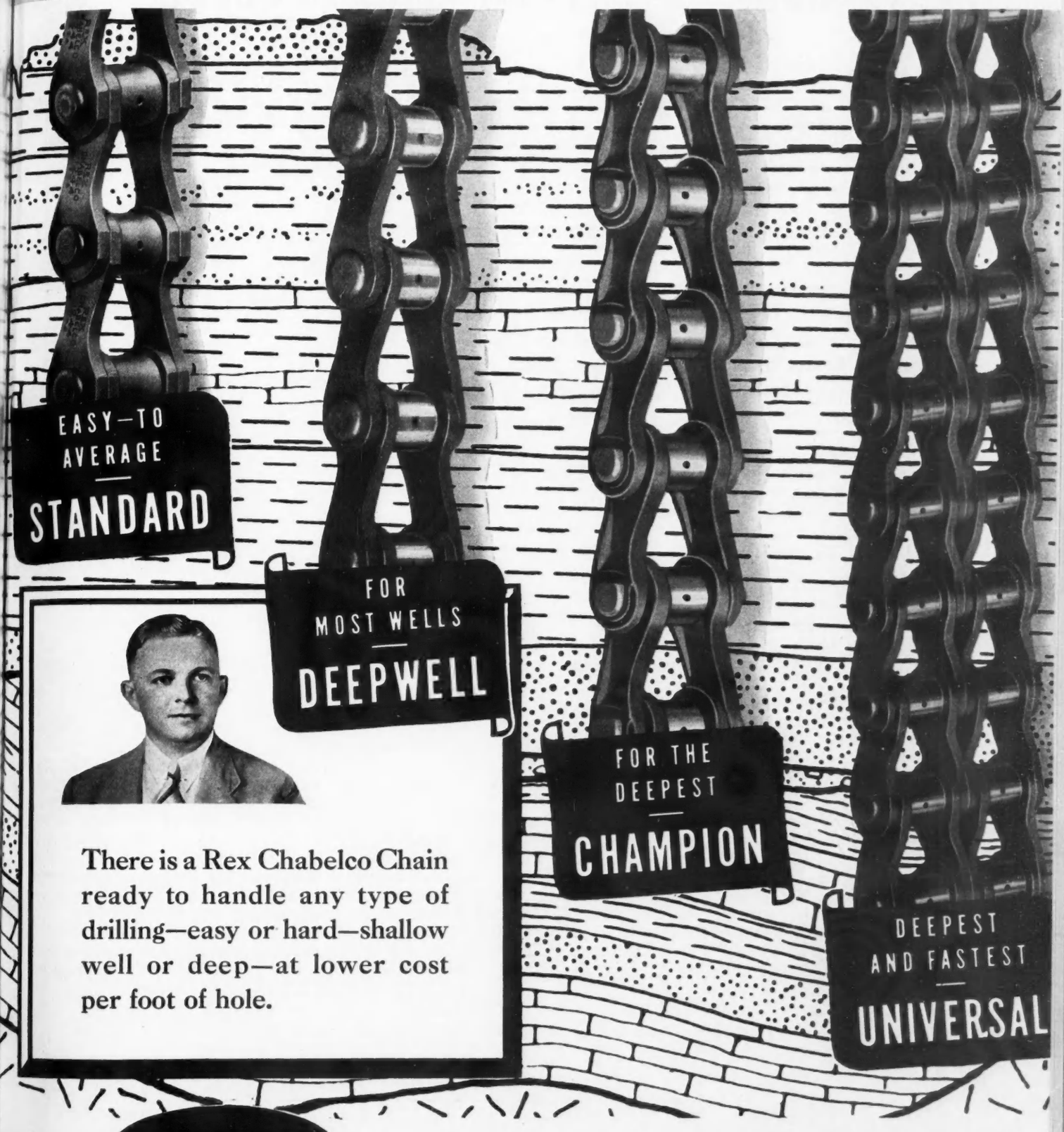
A resume of the pipe line construction shows that virtually all the work is directed either to Corpus Christi ship channel's terminals or to trunk lines having that point for their terminus.

Much of the oil brought to Corpus Christi is moved out by tankers, one of them is shown being loaded.



HOW TO HANDLE IT

IF IT IS ANY TYPE OR DEPTH OF DRILLING



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South Texas Drilling Depths Are Increasing

OF 62 fields producing below 5500 feet, 51 have been opened in past 3½ years, when average depth of all completions has increased 582 feet. Of 119 South Texas tests carried below 7000 feet, nearly 50 percent have been during first six months of this year.

By EARL S. POST,
Staff Writer

A DEFINITE trend toward deeper drilling, including exploration of possible producing horizons to below 10,000 feet, has been in evidence in South Texas during the past several months. The result of such operations has been the uncovering of several new deep reserves, and reasonable assurance that numerous others will be revealed as the prospecting of deeper zones is gaining momentum.

Statistics Reveal Trend

The above trend is especially borne out in a study of the number of tests drilled to below 7000 feet in South Texas. Prior to 1937, only 64 tests in the territory had ventured to that depth or below, while during the first six months of this year there were 55 wells carried below that level. Therefore, the year 1937 is certain to see more 7000-foot and deeper tests than in all South Texas' previous drilling career. This information is presented in concise form in Table 1.

Another example of deep drilling in South Texas is shown in Table 2, which presents the average drilling depth in South Texas for the past 3½ years. In 1934, the average depth of all completions in the region was 2734 feet, which increased to 3136 feet in 1935, and to 3204 feet in 1936. The average during the first six months has been 3316 feet per well. The United States had an average depth of 3052 feet in 1936. Likewise this table shows the increase in total footage drilled. The year 1936 saw approximately three times as much hole made as in 1934, and 1937 apparently will exceed last year by 2,000,000 feet.

Many Deep Wells

The result of deep drilling in South Texas is shown in Table 3, which shows that there are 62 producing fields in which production is found below 5500 feet. Prior to 1934, there were 8 wells producing from 5500 to 6000 feet in depth, and three from 6000 to 6500 feet. During 1934, seven fields were found productive from 5500 to 6500 feet. The first production below 6500 feet was found in 1935, when two fields were productive between 6500 and 7000 feet, and one below 7000 feet. In this year, there were 15 fields discovered with a producing depth in excess of

TABLE 1

South Texas Wells Drilled Below 7000 Feet by Counties and Depth Range

COUNTY	No. 7000-8000 Ft.	No. 8000-9000 Ft.	No. 9000-10,000 Ft.	10,000 Ft. and Below	No. Prior January 1, 1937	No. First Half 1937	Total No. to Date
Aransas	17	0	1	0	2	16	18
Calhoun	5	2	1	0	7	1	8
Hidalgo	10	5	0	0	11	4	15
Jackson	4	0	0	0	4	0	4
Nueces	28	0	1	0	6	23	29
Refugio	6	3	3	0	10	2	12
San Patricio	11	0	0	0	7	4	11
Victoria	4	0	0	0	4	0	4
Miscellaneous	14	1	1	3	13	5	18
Totals	99	11	6	3	64	55	119

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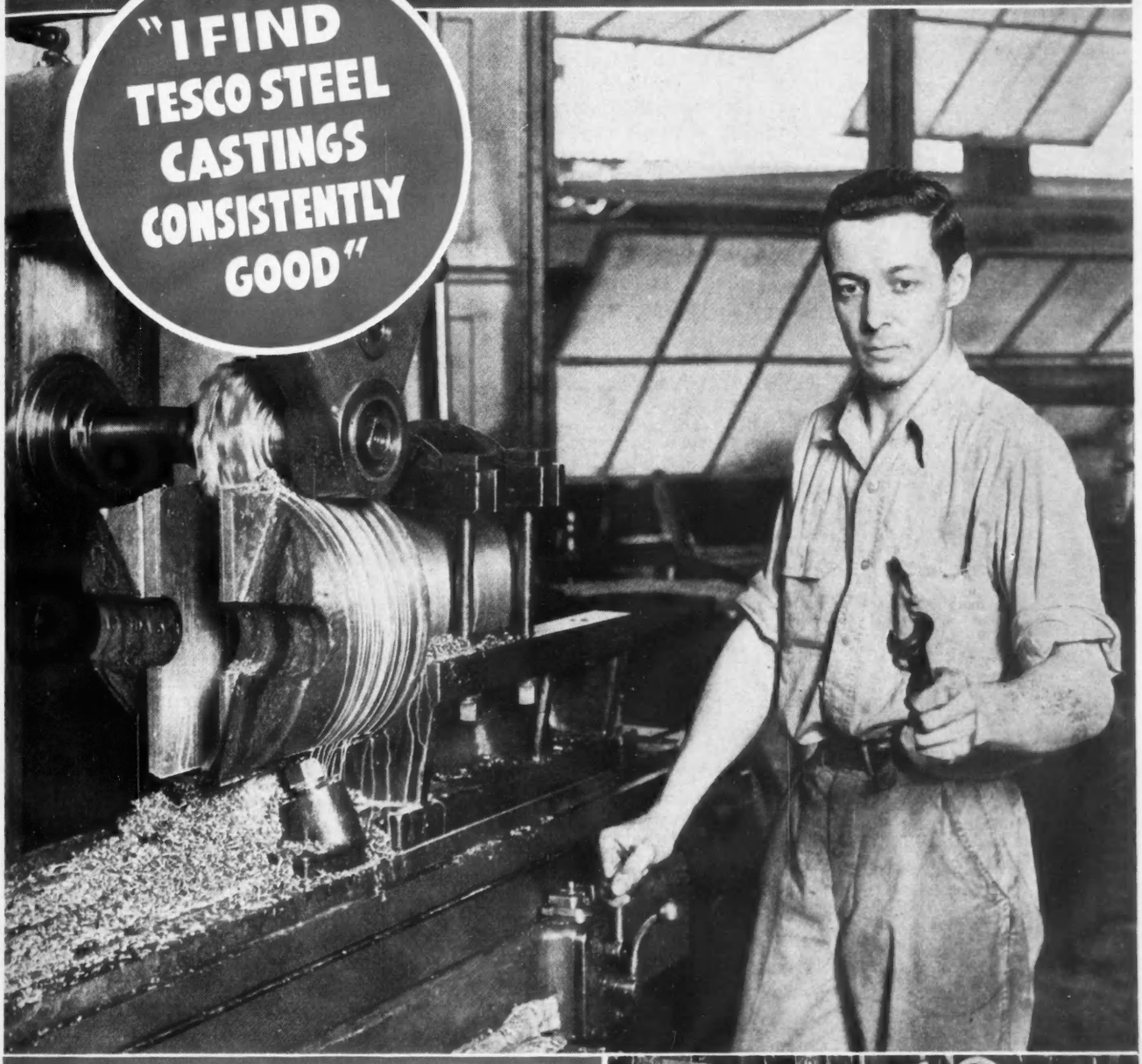
MASTER MACHINIST S. A. TEMPLE

"I FIND TESCO STEEL CASTINGS CONSISTENTLY GOOD"



During Stanley Temple's years of experience as a Master Machinist he has machined hundreds of Tesco steel castings, and he allows that he has found them "consistently good."

★ ★ ★ ★

Modern electric furnaces, scientific standards of practice, rigid control of quality through chemical and physical analysis of both raw material and the finished product . . . these are a few of the reasons why four out of five oil tool manufacturers on the Gulf Coast are building with Tesco steel.

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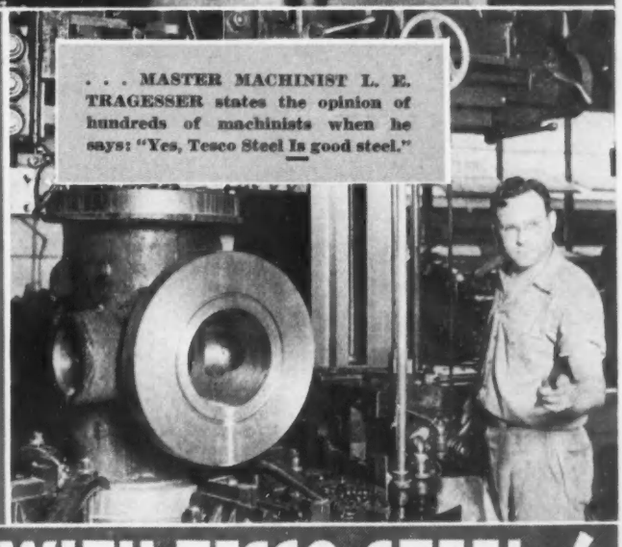
. . . MASTER MACHINIST L. E. TRAGESSER states the opinion of hundreds of machinists when he says: "Yes, Tesco Steel Is good steel."



BUILD BETTER OIL TOOLS WITH TESCO STEEL!

5500 feet. The year 1936 saw 16 fields proved productive below 5500 feet, and so far during 1937 there have been 13 new discoveries below this depth.

In summing up deeper operations, 36 fields or sands have been found productive at levels ranging from 5500 to 6000 feet, while 14 have been developed between the 6000-6500-foot level, eight at the 6500-7000-foot level and only four below 7000 feet. Interesting to note two of the 7000-foot or deeper fields have been opened this year.

Trend Is Important

The importance of this trend of development does not lie solely in the increased expenditure in drilling, but mainly tends to indicate that much of the future oil in South Texas will come from these unusual depths. Referring to the insert map in this edition, it will be noted that virtually all the South Texas territory offers producing possibilities to as far as mechanically possible to drill. Newest deep tests drilled into heretofore unexplored zones further prove theories of these deep reserves. Except for the ridge known as the Balcones Fault Zone (the backbone of South Texas) the basic rocks are found at depths ranging from 10,000 to unknown depths, probably far below 20,000 feet.

At least for the next few years there is little doubt but what South Texas work will be held to explorations above 12,000 feet, there being so much work remaining in known areas at much shallower depths.

TABLE 2

Yearly Average Drilling Depths in South Texas

YEAR	Total Well	Total Footage Drilled	Footage per Well
1934	1387	3,792,208	2734
1935	1950	6,114,705	3136
1936	3321	10,639,909	3204
1937*	1832	6,075,220	3316

* First 6 months only.
Note: Average depth of all completions in United States in 1936 was 3052 feet.

Development Changes

It is interesting to follow the development of the past several years, in which the very shallow reserves have been explored. In the Serpentine, Navarro, Austin chalk and Edwards limestone area of the Balcones Fault zone, drilling has been to depths ranging from 500 to 2750 feet; while in the Mirando district, save several small areas, the sands have been found at 700 to 3000 feet. These two areas, until the past 18 months, have provided the bulk of South Texas' production and reserves. The Pettus district then provided deeper production to 4200 feet, followed by the Gulf Coast Plane, in which several deep sands provided a portion of the production, the bulk coming from above 4500 feet.

Today, the above picture is much

TABLE 3

Deep Discoveries in South Texas By Years

YEAR	DEPTH IN FEET 5500–6000	6000–6500	6500–7000	Below 7000	Yearly Totals
Prior to 1934	8	3	0	0	11
1934	4	3	0	0	7
1935	10	2	2	1	15
1936	9	2	4	1	16
1937*	5	4	2	2	13
Depth Totals	36	14	8	4	62

* First 6 months of year only.

TABLE 4

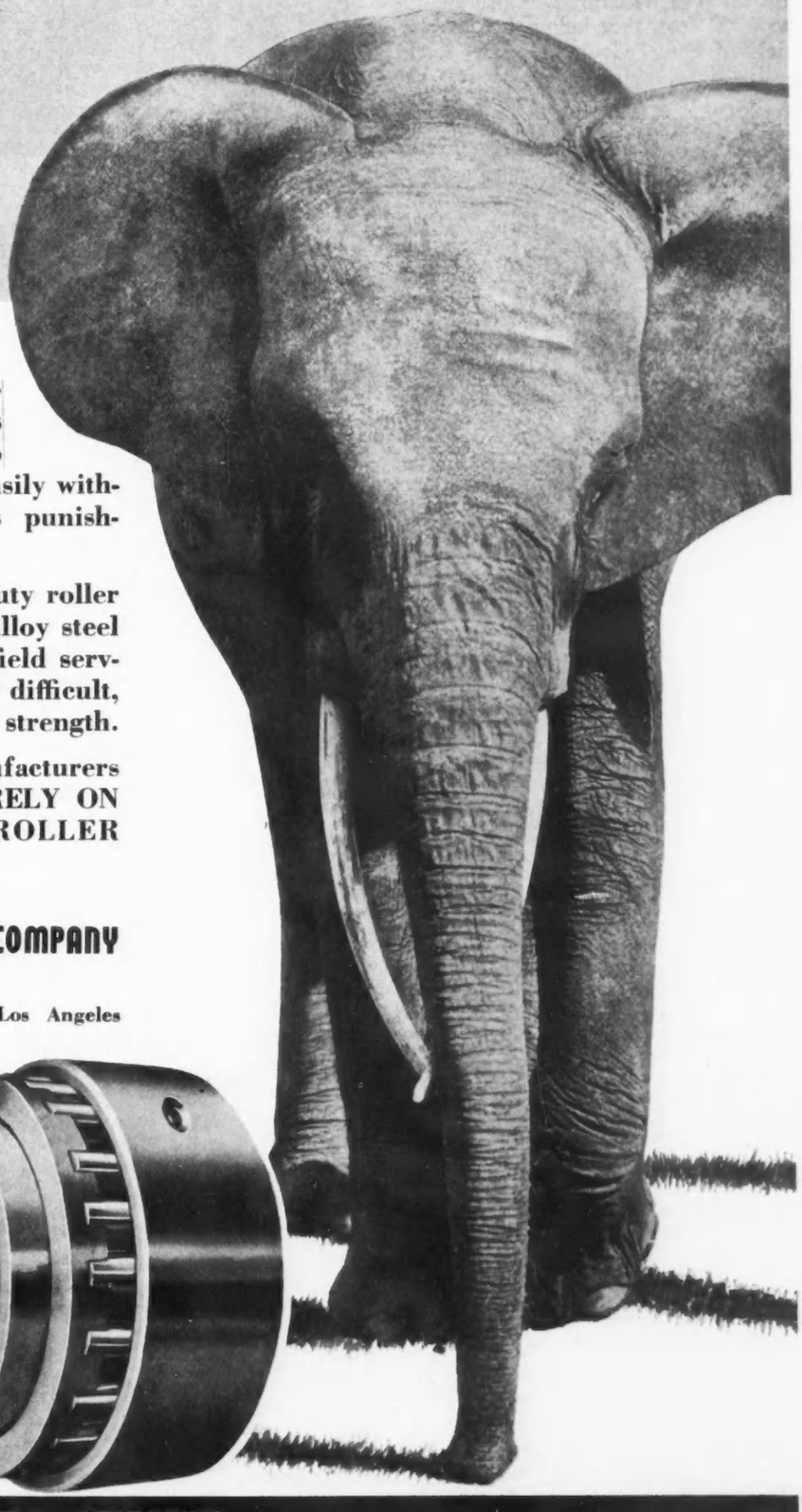
Tabulation of Wells Drilled to 7,000 Feet and Below in South Texas By Counties as of July 1, 1937

County	District	Company and Well	Year Drilled	Depth, Feet	Last Formation
Aransas	McCampbell	Atlantic Ref. Co., McCampbell 6-B	1937	7297	Frio
	McCampbell	Atlantic Ref. Co., E. Murray 1-B	1937	7090	Frio
	McCampbell	Atlantic Ref. Co., L. L. Porterfield 1	1937	7129	Frio
	Wildcat	Barnsdall Oil Co., Kate Edwards 1	1937	7997	Frio
	Wildcat	Barnsdall Oil Co., Kate Edwards 1-A	1937	9025	Frio
	McCampbell	Buckingham Oil Co., McCampbell 1-A	1936	7501	Frio
	McCampbell	Buckingham Oil Co., McCampbell 6-A	1937	7853	Frio
	McCampbell	Buckingham Oil Co., McCampbell 8-A	1937	7120	Frio
	McCampbell	Buckingham Oil Co., McCampbell 11-A	1937	7075	Frio
	McCampbell	Buckingham Oil Co., McCampbell 2-B	1937	7546	Frio
	McCampbell	Collins & Wilkerson, McCampbell 1	1937	7121	Frio
	McCampbell	Eleanor Oil Co., McCampbell 1-A	1937	7121	Frio
	McCampbell	Landreth Prod. Co., McCampbell 2-A	1937	7120	Frio
	McCampbell	Landreth Prod. Co., McCampbell 3-A	1937	7119	Frio
	McCampbell	Rutherford Oil Co., W. A. Schrivner 1	1937	7250	Frio
	McCampbell	Rutherford Oil Co., W. A. Schrivner 2	1937	7129	Frio
	Wildcat	Wheelock & Collins, Wheeler 1	1937	7020	Frio
Bastrop	Wildcat	Gant & Teas, Mihulec 1	1933	7505	Edwards Line
Bee	Pettus	United Prod. Corp., George A Ray 39	1932	7569	Mt. Selman
Brooks	Alta Mesa	Standard of Texas, B. Garcia 1	1936	8002	Vicksburg
Caldwell	Luling	United N. & S. Oil Co., Kelly 1	1928	7859	Schist
	Luling	United N. & S. Oil Co., Tiller 2	1928	7504	Schist
Calhoun	Wildcat	Continental Oil Co., American Nat'l (Moody) 2	1935	7384	Frio
	Wildcat	Continental Oil Co., American Nat'l (Moody) 3	1936	9083	Frio
	Wildcat	Continental Oil Co., Vandenberg 1	1936	8825	Frio
	Wildcat	Crown Central Pet. Corp., M. C. Driscoll 1	1936	7010	Frio
	Port Lavaca	Halliburton Oil Prod. Co., D. B. Burton 4	1935	7460	Frio
	Port Lavaca	The Texas Co., Blardoni 1	1935	7402	Frio
	Port Lavaca	The Texas Co., Martin 1	1935	7510	Frio
	Wildcat	Hiawatha Oil & Gas Co., John Roemer Est. 1	1937	8470	Frio
Cameron	Wildcat	Stapper Pet. Corp., Port Isabel 1	1937	7277	Frio
Dimmitt	Wildcat	Wilcox O. & G. Co., Light Ranch 1	1937	7685	Taylor Marl
Duval	Kohler	Humble O. & R. Co., V. Kohler 50	1931	7723	Carrizo
	Wildcat	Benedum & Trees, Clara D. Sevier 1	1936	7015	Frio
Fayette (Bastrop)	Wildcat	Paul C. Teas, Clement Vinklarek 1	1936	7142	Edwards Line
Edwards	Wildcat	Phillips Pet. Co., Hollman 2	1933	8230	Ordovician
Frio	Pearsall	Amerada Pet. Corp., Halff & Oppenheimer 2	1935	10,050	Travis Peak
	Pearsall	Amerada Pet. Corp., Halff & Oppenheimer 8	1937	10,341	Travis Peak
Hidalgo	Mestinas	Gulf States Oil Co., John Engelman 1	1935	7508	Frio
	Mestinas	Gulf States Oil Co., John Engelman 3	1937	8110	Frio
	La Blanca	Pantana Oil Corp., R. E. Harding 1	1936	7840	Frio
	La Blanca	Pantana Oil Corp., James McDougal 1	1937	6805	Frio
	La Blanca	Quintana Pet. Corp., J. C. Engleman 1	1936	8904	Vicksburg
	La Blanca	Sterling O. & R. Co., J. C. Engleman 1	1937	8012	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 1	1935	7606	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 2	1935	8044	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 3	1935	7493	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 4	1935	7759	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 5	1936	7529	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 6	1935	7569	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 7	1936	7608	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 8	1936	7822	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 9	1936	7654	Frio
	Mercedes	Union Sulphur Co., Am. Rio Grande 10	1937	8306	Frio
Jackson	Vanderbilt	Phillips Pet. Co., Drummond 1	1934	7042	Frio
	Mauritz	Shell Pet. Corp., McCrory 1	1935	7408	Vicksburg
	Mauritz	Shell Pet. Corp., Mauritz Bros. 1	1935	7401	Vicksburg
	Edna	Steinberger Pet. Corp., S. G. Dreeschell 1	1936	7180	Cockfield
Jim Wells	Premont	Magnolia Pet. Co., A. A. Seeligson 6	1935	7135	Jackson

Table continued on page 66.

SO TOUGH THEY NEVER TIRE

. . . so strong they never fail



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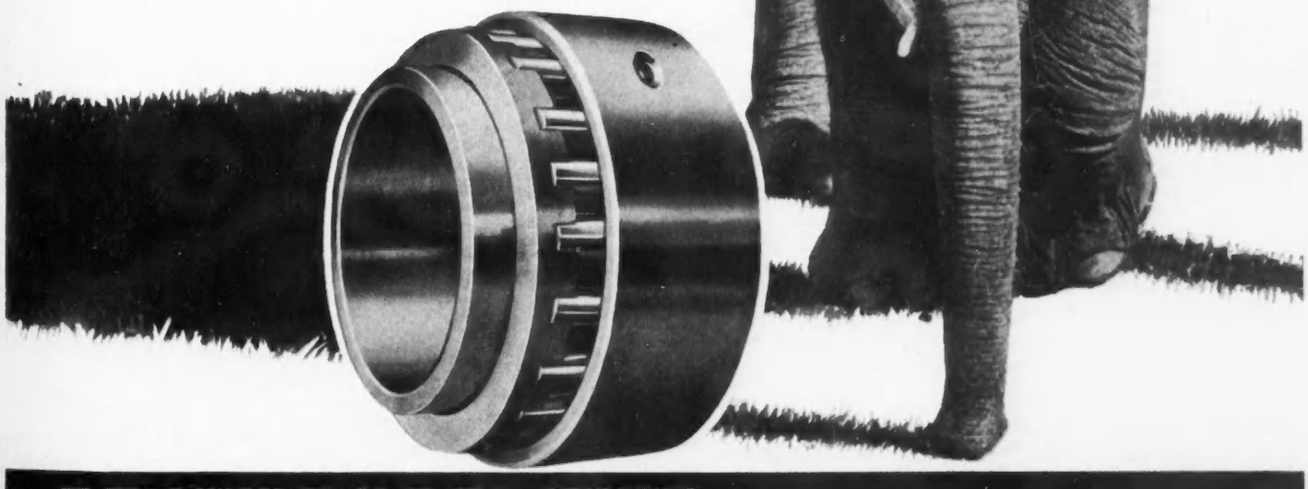
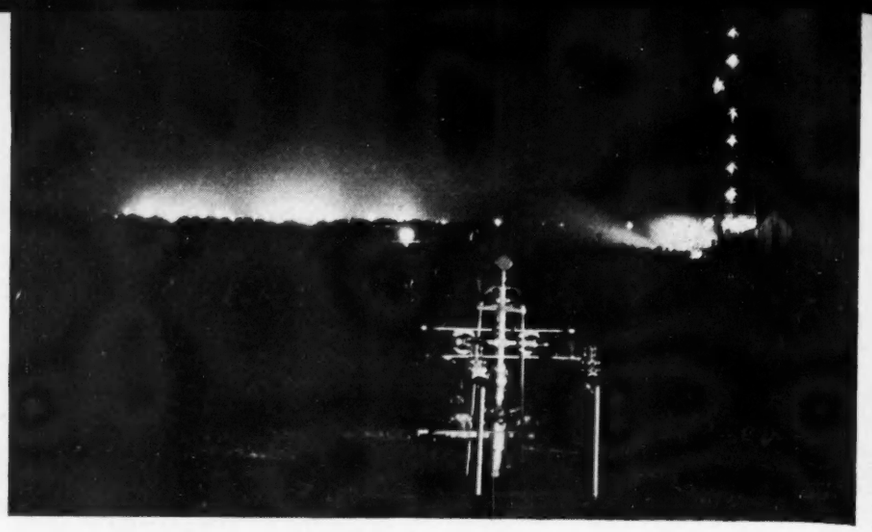


AMERICAN *HEAVY DUTY* **ROLLER BEARINGS**

changed. Pearsall, Frio County, on the southwestern edge of the Balcones Fault zone, is producing below 6200 feet and has had two operations to below 10,000 feet. The Gulf Coast has uncovered a series of sands to 8000 feet with its exploratory work going to below 9000 and 10,000 feet. Mirando district now has production to 6000 feet, that being the Sweden field of Duval County.

In developing these deeper reserves, the majority of the work has been drilling of present proved structures. Saxet, Nueces County, is one of the best illustrations. With a great amount of work done on the shallower sands to 4800 feet structural evidence was brought to light which indicated possibilities in the Frio sands below. The result was the uncovering of sands at 5500, 5600, 5700, 5800, 6200, 6700 and 6900 feet. The full Frio section in the field has not been drilled, hence it is possible that even deeper pay strata in this zone will be uncovered. The Vicksburg, Jackson and other zones below, likewise, loom as possible reserves.



A night scene in the Saxet field, one of the more important deep multiple sand discoveries.

TABLE 4—Continued

Tabulation of Wells Drilled to 7,000 Feet and Below in South Texas By Counties as of July 1, 1937

County	District	Company and Well	Year Drilled	Depth, Feet	Last Formation
Lavaca	Wildcat	Humble & Magnolia, C. S. Wilson 1	1935	7516	Carrizo
Maverick	Chittim	Rycade Pet. Corp. Chittim 2	1932	7635	Trinity
Nueces	Wildcat	Allen & Seaboard, J. O. Chapman 1	1936	7205	Frio
	Wildcat	Allen & Seaboard, J. O. Chapman 1-A	1937	7009	Frio
	Wildcat	Allen & Seaboard, J. O. Chapman 1-B	1937	7012	Frio
	Wildcat	Barnsdall Oil Co., Weil Bros., 1	1936	7502	Frio
	Wildcat	Mills Bennett, J. O. Lamb 1	1937	7202	Frio
	Saxet	Bentex Oil Corp., Fred Harmon 5	1937	7010	Frio
	Clara Driscoll	Buchanan & Blanco, Francis Gandi 1	1937	7308	Frio
	Wildcat	Clarkwood Oil Corp., H. B. Baldwin 1	1937	7040	Frio
	Wildcat	J. K. Culton, I. M. Singer 1	1937	7010	Frio
	Saxet	H. H. Howell, W. S. Hutchins 4	1937	7505	Frio
	Saxet	H. H. Howell, Rand Morgan 1	1937	7004	Frio
	Saxet	H. H. Howell, Rand Morgan 3	1937	7005	Frio
	Saxet	Hiawatha Oil & Gas, Mrs. Nellie Griffith 7	1937	7230	Frio
	Saxet	Hiawatha O. & G. Co., Hutchins-Stillwell 8	1937	7003	Frio
	Flour Bluff	M. F. Hurlburt, J. O. Phillips 1	1936	7503	Frio
	Wildcat	Edwin M. Jones, Lucy Cooke 1	1937	7424	Frio
	Agua Dulce	L. M. Lockhart, Ollie Purl 1	1937	7052	Vicksburg
	Saxet	T. P. Morgan, Morgan-Clark 6	1937	7184	Frio
	Saxet	Oso Dr., Inc., N. J. Roark 4	1937	7218	Frio
	Saxet	Phillips Pet. Co., Fred Frank 1	1937	7016	Frio
	Saxet	Phillips Pet. Co., Perkins & Le Hosse 3	1937	7010	Frio
	Saxet	Shell Pet. Corp., Ed Flato 1	1935	7006	Frio
	Saxet	Southern Minerals Corp., Rand Morgan 1	1935	7190	Frio
	Wildcat	Southern Minerals, Richard King 1	1937	7534	Jackson
	Saxet	Texon Dr. Co., L. M. Vance 5	1937	7000	Frio
	Wildcat	Taylor Ref. Co., J. V. Styles 1	1937	7022	Frio
	Wildcat	Republic & Culton, H. B. Baldwin 1-C	1936	7020	Frio
	Agua Dulce	United Prod. Corp., W. H. Harvey 1	1937	9002	Vicksburg
	London	Wellington Oil Co., M. L. Stockton 1	1937	7005	Frio
Refugio	Wildcat	Benedum & Trees, R. H. Welder 1	1936	7344	Frio
	Refugio	Independent O. & G. Co., Jerry Reilly 1	1930	7685	Vicksburg
	Refugio	Edwin M. Jones, Josephine Mitchell 1-B	1932	9131	Vicksburg
	Greta	Edwin M. Jones, J. M. O'Brien 11-A	1935	7461	Frio
	Refugio	Edwin M. Jones, Ben Shelton 1	1937	7005	Frio
	Wildcat	Magnolia Pet. Co., Mattie Wood 1	1935	7705	Cockfield
	Refugio	Mission Dr. Co., Moss Heard 1	1930	8120	Vicksburg
	Wildcat	Quintana Pet. Corp., Tom O'Connor 1-B	1934	7046	Frio
	Wildcat	Quintana Pet. Corp., Tom O'Connor 2-B	1935	9937	Vicksburg
	Tomoconnor	Quintana Pet. Corp., Tom O'Connor 15-A	1935	8174	Vicksburg
	Wildcat	Tide Water-Associated, E. G. Landgrof 1	1936	8506	Frio
	Refugio	United Prod. Corp., J. J. O'Brien 12	1937	9225	Vicksburg
San Patricio	McCampbell	Atlantic Ref. Co., Maryland Trust 2	1937	7142	Frio
	Wildcat	Benedum & Trees, E. H. Welder 1	1935	7206	Frio
	Wildcat	Benedum & Trees, E. H. Welder 2	1936	7019	Frio
	Wildcat	Eleanor Oil Co., J. F. Green 1	1937	7305	Frio
	Sinton	Heep Oil Corp., E. H. Welder (4) 1-A	1934	7247	Frio
	Wildcat	Hooper & Rutherford, Inc., J. D. Wells 1	1937	7547	Frio
	Angelita	Humble O. & R. Co., J. F. Welder 1	1935	7131	Frio
	Midway	Phillips Pet. Corp., H. Schmidt 1	1937	7005	Frio
	White Point	Saxet Oil Co., Rachel 19	1933	7205	Frio
	Wildcat	Willis Storms, Nancy Hobbs 1-A	1936	7004	Vegua
	Plymouth	Sun Oil Co., M. K. Edgar 2	1936	7030	Frio
Victoria	Keeran	Gulf Oil Corp., C. R. Keeran 3	1933	7465	Vicksburg
	Keeran	Humble O. & R. Co., J. Mitchell 2	1934	7715	Vicksburg
	Wildcat	Quintana Pet. Corp., S. W. McComich 1	1933	7402	Cook Mountain
	McFaddin	The Texas Co., A. M. McFaddin 3	1932	7025	Frio
Willacy	Wildcat	Shell Pet. Corp., Yturria 1	1937	10,286	Frio
	Wildcat	Stapper Pet. Corp., Port Isabel 1	1936	7778	Frio
Zavalla	Wildcat	Bay Oil Corp., Nat'l Bank Commerce 1	1936	7082	Edwards Line

Coast Area Leads

Of course, the major part of this deep drilling is at this time centered around the Coastal sector of South Texas. This is in part a result of the trend along the remainder of the Gulf Coast to develop these deeper reserves. But, the remainder of South Texas must not be overlooked as possible deep bets. In virtually every area, present development has been confined to a certain known geological zone with little work being directed to lower sands. This does in no way indicate a lack of interest in these zones, but so little definite information is available on them, that drilling is directed to known quantities. It is for this reason that South Texas can be classified as an area which has been merely scratched.

Nueces County, as shown in Table 1, leads in number of tests drilled to below 7000 feet, despite the fact that it does not have a single producing sand below that level. The greater number of these 29 tests have been wildcats. Aransas County, second in the list, has 18 wells to below 7000 feet, of which 16 were drilled the first six months of 1937. This development is accounted for mainly by the McCampbell field, in which a 7000-foot zone recently was proved productive. Hidalgo County, with two fields below 7000 feet, has had 10 wells drilled to between 7000 and 8000 feet and five wells below the latter depth.

INDEX
South Texas Oil and Gas Fields and Prospects

	Page
Adams	114
Adkins	78
Agua Dulce	114
Albercas	132
Alta Mesa	80
Alta Verde	80
Alta Vista	78
Alworth	106
Anchorage	69
Andrews	136
Angelita	122
Aransas County	69
Aransas	122
Armagoso	106
Arroyo Grande	124
Atascosa County	69
Aviator	132
Baldwin	116
Barbacoas	126
Bastrop County	70
Batesville	138
Bee County	70
Beeville	70
Bentonville-King	106
Bexar County	78
Big Foot	98
Blas Uribe	136
Bloomington	128
Bonnie View	120
Braynon	82
Brooks County	80
Brunnell	108
Buchanan	82
Byersville	134
Byrne Pasture	112
Cabeza Creek	99
Caesar	72
Caldwell County	82
Calhoun County	86
Calliham	112
Carolina-Texas	132
Carrizo Springs	88
Carroll	70
Carruth	126
Cedar Creek	70
Chicon Lake	114
Chapman	116
Chapman-Abbott	134
Charamousca	88
Charco Redondo	136
Chittim	112
Clara Driscoll	116
Clopton-Green	126
Coffey	78
Cole Group	132
Cole-Bruni	132
Cole-O'Hern	132
Coletto Creek	128
Colmena	88
Colorado	106
Comitas	136
Cooksey	78
Copeland	72
Cosden	72
Crow Hill	138
Crowther	112
Crystal City	138
Cuellar	136
Cuevitas	126
Dale	82
Darst Creek	102
Dash	72
Devine	114
D. D. Ranch	126
Dimmitt County	88
Dirks	72
Doering	98
Driscoll	88
Dunlap	82
Duval County	88
Eagle Hill	90
Eckert	78
Edna	104
Edwards County	98
El Mesquite	90
Escobas	136
Ezzell Ranch	112
Fannin	99
Fernandez	104
Flour Bluff	116
Foley	72
Fordtran	130
Fort Merrill	110
Fox	120
Frio County	98
Ganado	104
Gas Ridge	80
Goliad County	99
Gonzales County	102
Government Wells	90
George Ray	78
Gray Ranch	90
Grayburg	72
Green	108
Greta	120
Guadalupe County	102
Gulf O'Connor	122
Gyp Hill	82
Hayden	126
Henne-Winch-Farris	106
Heyser	86
Hicks	72
Hidalgo County	104
Hilbig	70
Hoffman	90
Hollman	98
Holzmark	72
Hords Creek	99
Hughes	130
Ignacio	92
Ina	114
Jackson County	104
Jacob	112
Jay Welder Ranch	130
Jennings	136
Jim Hogg County	106
Jim Wells County	106
Karnes County	108
Keeran	130
Kenedy County	108
Kendall County	108
Kerr County	108
Killam	132
Kimbro	128
Kingsville	108
Kleberg County	108
Kohler	92
La Bahia	99
La Blanca	104
Labbe	92
Lamar	69
Larrimore	82
La Sal Viejo	134
Laurel	132
Leaseholders	134
Live Oak County	110
Lobo	110
Loma Alta	112
Loma Novia	92
Loma Vista	94
London	118
Lone Oak	80
Lopeno	136
Lopez	134
Los Olmos	126
Love Ranch	108
Lowe Ranch	112
Luby	118
Luling	82
Lundell	94
Lytton Springs	82
Macdona	80
Maetze	99
Magnolia-Hahl	94
Maierhofer	102
Manda	128
Manford	102
Manhuilla Creek	99
Marbach	110
Martinez	136
Mathis	122
Mauritz	104
Maverick County	112
McCampbell	69
McFaddin	122-130
McMullen County	112
McNeil	110
Medina County	114
Mercedes	104
Mestenas	104
Midway	122
Milam County	114
Minerva-Rockdale	114
Mirando City	134
Mirando Valley	136
Mission	80
Moca	134
Morgan Ranch	72
Mount Lucas	110
Normana	72
Nolte	102
North Dale	70
North Jacob	112
North Lucas	110
North Pettus	108
North Sweden	94
Nueces County	114
Nursery	130
Oakville	110
O'Connor	122
Orange Grove	106
Ottine	102
Palangana	96
Palo Blanca	82
Pappas	138
Pearsall	98
Pena	96
Peters	96
Peterson	98
Pettus	72
Peyote	106
Pickett	110
Piedre Lumbre	96
Piedras Pintas	96
Pinta Hill	108
Placedo	130
Plummer	74
Plymouth	122
Port Lavaca	86
Premont	106
Rancho Solo	96
Randado	106
Ray	74
Realitos	96
Refugio County	120
Refugio	122
Reiser	134
Rhode	112
Ricaby	128
Rigsby	98
Rio Grande City	128
Roma	128
Rutledge	74
Salmar	102
Salt Flats	86
Samfordyce	104
Sandia	108
San Diego	108
San Patricio County	122
Sarco Creek	99
Sarnosa	96
Santo Domingo	128
Saxet	118
Saxet, Deep	118
Saxet Heights	120
Saxet, Shallow	120
Schattel	99
Schimmel-Batts	70
Seadrift	86
Serpentine (Bastrop)	70
Seven Sisters	96
Simmons	110
Sinton	124
Sisterdale	108
Slick	99
Somerset	69
S. R. C.	96
South Agua Dulce	120
South Calliham	112
South Clara Driscoll	120
South Darst Creek	102
South Hoffman	96
South Ricaby	128
South Von Ormy	80
Southeast Pearsall	99
Southwest Pettus	74
Staples	102
Starr County	124
Stratton	120
Strauch	74
Sweden	98
Taft	124
Taylor	114
Telferner	130
Thelma	80
Thomas-Lockhart	98
Thomaston	130
Thompson Ranch	74
Three Rivers	110
Tidal-Seligman	104
Tomoconnor	122
Thrall	134
Travis County	128
Tuleta	74
Vanderbilt	106
Victoria County	128
Villa	138
Von Ormy	80
Voss	74
Warden	130
Webb County	132
Weiss	74
Wentz	114
Weser	99
West Cole	134
West Tuleta	74
White	114
Whitehead	98
White Point	124
Willacy County	134
Williamson County	134
Woods	128
Mattie Woods Ranch	??
Woodward	99
Wray	138
Yost	70
Yturri-Southton	80
Zapata County	136
Zavalla County	138
Zoboroski	104

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SOUTH TEXAS OIL FIELDS and Prospects

Compiled by EARL S. POST of THE OIL WEEKLY Staff

Acknowledgment is made to the many operators and companies who have cooperated in the following compilation by making available their records and checking the data presented.

All information as of mid-year, 1937, unless otherwise specified

ARANSAS COUNTY

LAMAR*

Centering around Lamar Townsite, William Lewis Sur., 9 mi ne Rockport. **Means of Discovery:** Geophysical work. **Extent of Development:** Barnsdall Oil Co. drilled Kate J. Edwards 1 to 7997 ft., in Frio, drill stem stuck and well blew out, ran wild for 12 hours, controlled and completed through drill stem flowing considerable gas with 12 bbls. of oil plus 40 bbls. of salt water per day on Feb. 14, 1937. Second well, a 660-ft. offset, drilled sands showing gas and set casing below to prevent blowout, on July 1, 1937, was drilling around 9000 ft.

ARANSAS-SAN PATRICIO COUNTY

McCAMPBELL

McCampbell subdivision, James Orick Survey 2 miles northwest Aransas Pass. **Discovery Well:** Buckingham Oil & Gas Co.'s McCampbell 1, July 25, 1936, flowing 250 bbls 40.5 gravity oil and 10,000,000 cu ft gas; 7/64-in choke; 2250 lbs tubing 2575 lbs casing pressure; total depth 7501 ft; producing horizon 6539-54 ft; elevation 15 ft derrick floor; plugged back, sidetracked and drilled to 6560 ft, set 7-in casing on bottom, perforated at 6539-47 and 6551-54 ft. **Means of Discovery:** Geological and geophysical information. **Type Structure:** Anticline, some faulting and sand lensing. **Producing Formation, Depth and Gravity:** Marginulina, 6550 ft, 40.5 gravity; Frio, 6790 ft, 46 gravity; 7100 ft, 39.9 gravity; several wells in 7100-ft sand produce distillate which is 56-58 gravity. **Producing Area:** 500 acres; 440 acres in oil. **Extent of Development:** To Jan. 1, 1937; 5 wells, 4 oil, 1 gas. First 6 Months 1937: 26 oil wells. **Deepest Test:** Buckingham Oil Co.'s McCampbell 6-A; 7863 ft; plugged back and completed above as oil producer, during 1937. **Estimated Ultimate Recovery:** 4,000,000 bbls, including all sands. **Production Through 1936:** 29,110 bbls. **Indicated Remaining Reserve:** 3,970,890 bbls. **Daily Production July 1, 1937:** 2175 bbls. **Oil Outlet:** Atlantic Pipe Line Co. **Rigs Running July 1, 1937:** 10. **Principal Leaseholders:** Buckingham Oil & Gas Co., Atlantic Oil Producing Co., Danrey Oil Co., Landreth Production Co., Edwin M. Jones, Clayton Eaton, Rutherford Oil Corp., Shasta Oil Co. **Subsequent Discoveries Since July 1, 1936:** Buckingham & Jones' McCampbell 2-B, May 27, 1937, flowing 86 bbls fluid, 15 percent salt water, rest 54.5 gravity oil 9/64-in choke, tubing pressure 2700 lbs; casing 2850 lbs; total depth 7546 ft, plugged back and perforated casing 7085-95 ft and 7112-22 ft with 22 shots. Buckingham Oil Co.'s McCampbell 6-A, June 3, 1937, flowed 200 bbls per fluid, 40 percent 46 gravity oil, remainder salt water, ⅛-in choke, tubing pressure 2350 lbs, casing 2600 lbs, drilled to 7853, plugged back and completed through perforations 6782-94 ft.

ATASCOSA COUNTY

ANCHORAGE*

Crus Laden Survey No. 45 and F. de La Garza Survey, near Anchorage. **Means of Discovery:** Geological data indicated considerable faulting, also magnetometer work. **Extent of Development:** O. W. Killam abandoned O. K. Seitz 1, July 15, 1933, showed serpentine 3512-3624 ft, set 5⅝-in casing 3530 ft, test 3,000,000 cu ft gas, little oil, total depth 3640 ft, but water broke in from above, drilled ahead to 4065 ft and abandoned. Top Edwards lime 4037 ft. Helvetia Oil Co.'s Susie Pratt 1 drilled to 2434 ft after encountering sand and sandy shale between 2249 and 2300 ft, the section between 2258-77 ft being green sand. The hole was plugged back to 2300 ft, 7-in casing set at 2245 ft, where the well showed about 5 bbls of 44 gravity oil per day. It was deepened to 3778 ft in Edwards lime and abandoned. Pratt 2 abandoned in 1937 at 3460 ft after failing to complete as oil well in serpentine.

* Prospect. †Salt dome, no production. ‡Gas field.

SOMERSET

Includes area including and between John Sharp and John Wilson Surveys, 1 mi s Somerset. **Discovery Well:** C. Kurz's Fee 1, 1911, pumping 20 bbls 34 gravity oil, approximately 900 ft. **Means of Discovery:** Water well showed oil and was completed as a commercial producer. **Type Structure:** Series of sand lenses. Broken by faulting. **Producing Formation, Depth and Gravity:** Navarro-Taylor Series, ranging from 900 to 2100 ft, 32 to 44 gravity depending upon portion of field. **Producing Area:** 11,390 acres. **Extent of Development:** To Jan. 1, 1937: 1240 wells; 1180 oil, 14 gas, 46 failures. During 6 months 1937, none. **Deepest Test:** Milham Corp. (Ballard & Underwood) Easterwood 1, abnd 5311 ft in Trinity. **Estimated Ultimate Recovery:** 12,500,000 bbls. **Production Through 1936:** 10,428,015 bbls. **Indicated Remaining Reserve:** 2,071,985 bbls. **Daily Production July 1, 1937:** 652 bbls. **Oil Outlet:** Pioneer Oil & Refining Co., Frontier Oil Co., Texas Petroleum Co. and Grayburg gathering systems, trucks, and pipe line to Phoenix Refinery in San Antonio. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Arkmo Oil Co., Consolidated Oil Co., Cal-Tex Oil Co., Empire Gas & Fuel Co., Frontier Oil Co., Grayburg Oil Co., Geo. Hambleton, Walter Hamilton, Helvetia Oil Co., Idaho Oil Co., A. E. Johnson, L. Kaufman, Geo. Jlemcke, A. J. Kirm, A. A. Kurz, Kurz Oil Co., Lain Oil Co., George Leonard, W. C. McBride, Inc., National Oil Co., Omilar Oil Co., Ona Oil Co., Venture Petroleum, Pioneer Oil & Refining Co., A. St. John, Somerset Oil Co., Somerset Crude Oil & Refining Co., Rogers and Rogers, Texas Petroleum Co., J. H. Williams. **Remarks:** First field in South Texas to produce at least 1,000,000 barrels of crude. Includes area to northeast referred to as South Medina.

Unusual insert map of Southwest Texas

accompanies this issue of The OIL WEEKLY

The large scale insert map published with this number shows not only each producing field, but the formation that is productive and a typical geological log of every Southwest Texas district.

This is the second time a map of this type has ever been published by an oil trade journal. The first time was in The OIL WEEKLY of May 3, when a similar map of Kansas was presented. However, the Southwest Texas map exceeds the Kansas one, in that 11 colors were required in contrast with seven. This required a great deal of expense and painstaking effort, but we feel it was worth while because of the value it will have for the industry.

We are indebted to Darby Petroleum Company for the base map, and for its kind permission to reproduce.

BASTROP COUNTY

CARROLL

Andrew Mayes Survey No. 19, 10 mi sw Bastrop. **Discovery Well:** Sun Oil Co. and Parson & Mayfield's J. H. Carroll 1, Aug. 28, 1932, pumping 75 bbls 36 gravity oil, 2378 ft, top serpentine 2245 ft, soft serpentine 2300 ft, oil in last 2 ft. **Means of Discovery:** Geophysical and geological survey. **Type Structure:** Igneous plug cut by ne-sw faulting. **Producing Formation, Depth and Gravity:** Serpentine and broken serpentine with chalk, 2300 ft, 36 gravity. **Producing Area:** 80 acres. **Extent of Development:** To Jan. 1, 1937, 6 wells, 4 oil, 2 failures; during first six months 1937: 1 failure. **Deepest Test:** Sun Oil Co.'s Page Probst 1, abnd Feb. 15, 1935, 2919 ft. **Estimate Ultimate Recovery:** 100,000 bbls. **Production Through 1936:** 27,734 bbls. **Indicated Remaining Reserve:** 72,266 bbls. **Daily Production July 1, 1937:** 245 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Sun Oil Co., Parsons & Mayfield, Nelson Pruett.

CEDAR CREEK

R. Gage, A. Navarro and Addison Litton Surveys, 4 mi e Cedar Creek. **Discovery Well:** Marts & Beavans' Amanda Reyes 2, June 1, 1933, flowing 175 bbls 34.2 gravity oil, 1707 ft; top serpentine 1695 ft; elev 501 ft. **Means of Discovery:** Geophysics. **Type Structure:** Serpentine plug, oval shape, axis ne-sw. **Producing Formation, Depth and Gravity:** Serpentine, or igneous rock, Cretaceous age, 1700 ft, 34.2 gravity. **Producing Area:** 170 acres. **Extent of Development:** To Jan. 1, 1937, 31 wells, 17 oil, 14 failures. First 6 months, 1937: None. **Deepest Test:** Joe Mills' S. A. Voss 2, abnd 1849 ft, 1933. **Estimated Ultimate Recovery:** 550,000 bbls. **Production Through 1936:** 190,708 bbls. **Indicated Remaining Reserve:** 359,292 bbls. **Daily Production July 1, 1937:** 45 bbls. **Oil Outlet:** Bastrop County Pipe Line Co. to Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Cole Petroleum Co., Joe Mills, Marts & Beavans, Adams & Lyles, Great American Oil Co. **Remarks:** Includes two well area sometimes referred to as North Cedar Creek.

HILBIG

S. Wolfenberger and A. Mayes Surveys, 7 mi s Bastrop. **Discovery Well:** Humble Oil & Refining Co.'s Annie Hassler 1, Feb. 15, 1933, flowing 1872 bbls 37.1 gravity oil, 1-in choke, 350 lbs tubing, 500 lbs casing pressure. Producing horizon 2468-2577 ft. **Means of Discovery:** Magnetometer. **Type Structure:** Domal type structure (plug). Presence of fault. **Producing Formation, Depth and Gravity:** Serpentine, Cretaceous age, 2500 ft, 37.1 gravity. **Producing Area:** 260 acres, all in oil. **Extent of Development:** To Jan. 1, 1937, 19 wells, 14 oil, 5 gas. First 6 months, 1937: 1 failure. **Deepest Test:** Humble Oil & Refining Co.'s P. Wolfenberger 1, abnd in 1933 at 2683 ft, Edwards limestone. **Estimated Ultimate Recovery:** 2,240,000 bbls. **Production Through 1936:** 1,056,206 bbls. **Indicated Remaining Reserve:** 1,183,794 bbls. **Daily Production July 1, 1937:** 605 bbls. **Oil Outlet:** Humble Oil & Refining Co. gathering system. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Humble Oil & Refining Co. **Remarks:** Company operating pressure maintenance system.

NORTH DALE

John Maximillan, Joshua Gray Surveys, 6 mi n Dale. **Discovery Well:** Ogden & Reed Oil Co.'s C. L. Riddle (94½-ac tract) 1, Sept. 4, 1932, pumping 100 bbls 38 gravity oil per day, 2223 ft; producing horizon 2164-2223 ft; 6⅝-in casing 2164 ft; elev 440 ft. **Means of Discovery:** Geological information, surface fault; north extension to pool result of geophysical work. **Type Structure:** Producing an upthrow side of fault running ne and sw. **Producing Formation, Depth and Gravity:** Dale lime, eroded serpentine and broken Taylor. No solid serpentine. Dale lime is local name; 2200 ft, 38 gravity. **Producing Area:** 340 acres. **Extent of Development:** To Jan. 1, 1937, 33 wells, 20 oil, 13 failures. First 6 months, 1937: 2 oil wells. **Deepest Test:** Ogden and Reed's M. F. Talley 3, abnd in Edwards lime Jan. 1, 1935. **Estimated Ultimate Recovery:** 840,000 bbls. **Production Through 1936:** 432,622 bbls. **Indicated Remaining Reserve:** 407,378 bbls. **Daily Production July 1, 1937:** 210 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Ogden & Reed Oil Co., Marts & Beavans, Chiquita Oil Co. **Remarks:** Acidization has worked with considerable degree of success.

SCHIMMEL-BATTS

James Doyle Survey, 6 mi n Lytton Springs. **Discovery Well:** Schimmel-Batts Williams 1, May 15, 1931; pumping 6 bbls 25 gravity oil per day, 1977 ft; producing horizon top serpentine 1373 ft; topped chalk 1977 ft; 6⅝-in casing set 1384 ft. **Means of Discovery:** Geological information, surface indications. **Type Structure:** Small igneous plug. **Producing Formation, Depth and Gravity:** Serpentine, 1500 ft, 25 gravity. **Producing Area:** 30 acres. **Extent of Development:** To Jan. 1, 1937, 6 wells, 3 oil, 3 failures. During 6 months, 1937: None. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 15,000 bbls. **Production Through 1936:** 5782 bbls. **Indicated Remaining Reserve:** 9218 bbls. **Daily Production July 1, 1937:** Shut in. **Oil Outlet:** Pitzer-West & Boone pipe line to Dale. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Texas Petroleum Co.

SERPENTINE*

Wells scattered through western portion of Bastrop, eastern Travis and Williamson counties. **Means of Discovery:** Mainly on magnetometer surveys. **Extent of Development:** Not less than 50 wildcats have been drilled on magnetometer structures during the past 5 years, the majority finding serpentine, but in many cases, hard and dry. These prospects are not being treated individually due to their similarity. The usual method of hunting these plugs is to work the area with magnetometer and drill on the flank of the structure. Several wells may be required to find the soft, porous, saturated section of the plug.

YOST

A. Garcia Survey, 14 mi sw Bastrop. **Discovery Well:** Cranfill-Reynolds and A. M. Loomis' A. M. Yost 1, Nov. 4, 1928, flowing 400 bbls 25.2 gravity oil per day, 1598 ft; producing horizon 1480-1548 ft, elev 500 ft. **Means of Discovery:** Geological information. **Type Structure:** Igneous plug cut by ne-sw fault. **Producing Formation, Depth and Gravity:** Serpentine, 1500 ft, 15.2 gravity. **Producing Area:** 150 acres, all in oil. **Extent of Development:** To Jan. 1, 1937, 32 wells, 25 oil, 7 failures. During 7 months, 1937: 1 oil. **Deepest Test:** Cranfill-Reynolds' A. M. Yost 6, abnd 2080 ft, Feb. 2, 1936. **Estimated Ultimate Recovery:** 1,100,000 bbls. **Production Through 1936:** 874,313 bbls. **Indicated Remaining Reserve:** 225,687 bbls. **Daily Production July 1, 1937:** 45 bbls. **Oil Outlet:** Pitzer, West & Boone line to Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Pitzer, West & Boone; Ogden & Reed.

* Prospect. †Salt dome, no production. ‡Gas field.

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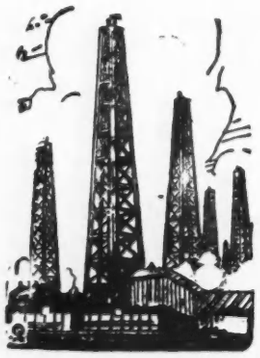

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BEE COUNTY

BEEVILLE

J. Ryan Survey, 3½ mi s Beeville. **Discovery Well:** George M. Church's J. C. Woods 1, Sept. 22, 1935, 20,000,000 cu ft gas, spraying 61 bbls 61.7 gravity oil per day, ¼-in choke, 1550 lbs tubing, 1800 lbs casing pressure, total depth 5831 ft, producing horizon 5810-31 ft, elev 177 ft derrick floor. **Means of Discovery:** Geological-geophysical prospect, development prior to discovery. **Type Structure:** Sand lens cut by fault. **Producing Formation, Depth and Gravity:** Conroe sand in Yegua, 500 ft, 61.7 gravity, distillate. **Producing Area:** 20 acres. **Extent of Development:** To Jan. 1, 1937, 3 wells, 1 oil, 1 gas, 1 failure. During 6 months, 1937: 1 failure. **Deepest Test:** Marine Oil Co. (was G. M. Church), Webb-Hearn 1, abnd 5936 ft, showed salt water, distillate and gas, Apr. 25, 1936. **Estimated Ultimate Recovery:** 15,000 bbls. **Production Through 1936:** 575 bbls. **Indicated Remaining Reserve:** 14,425 bbls. **Daily Production July 1, 1937:** Gas. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** George M. Church, Marine Oil Co., Lonnie Glasscock, Houston Oil Co., Magnolia Petroleum Co. **Remarks:** Primarily a gas field, still in exploratory stage.

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CAESAR

Franklin Lewis, Wm. F. Hodge, P. B. McEarly Surveys, extending nw-sw of Caesar. **Discovery Well:** Caesar Oil Co.'s C. E. Pullin 1-A, May 14, 1934, 20,000,000 cu ft gas spraying 32.2 gravity oil per day, ¼-in choke, 1150 lbs tubing, 1300 lbs casing pressure, total depth 3034 ft, producing horizon 3007-34 ft, elev 433 ft. **Means of Discovery:** Geological information, drilling on strike with wildcat showing gas and oil. **Type Structure:** Narrow fold against ne-sw fault, oil on steep flank of structure, large gas zone at crown of fold. **Producing Formation, Depth and Gravity:** Pettus of upper Cockfield, Jackson age, 3000 ft, 32.2 gravity. **Producing Area:** 620 acres. **Extent of Development:** To Jan. 1, 1937, 52 wells, 31 oil, 7 gas, 14 failures. During 6 months 1937: 1 gas. **Deepest Test:** Houston Oil Co.'s Miller 1, 3404 ft; set 7-in casing at total depth, plugged back and perforated about 3020 ft, completed as gasser June 10, 1934. **Estimated Ultimate Recovery:** 3,000,000 bbls. **Production Through 1936:** 624,971 bbls. **Indicated Remaining Reserve:** 2,375,029 bbls. **Daily Production July 1, 1937:** 620 bbls. **Oil Outlets:** Falcon Pipe Line Co. line to Pettus, Logco Pipe Line Co. line to Burnell, both have loading racks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Caesar Oil Co., El Toro Oil Co., Firm Oil Co., Luling Oil & Gas Co., McAlester Fuel Co., R. B. Swiger et al, Sun Oil Co., Commodore Oil Co.

COPELAND*

Obid Marshall Survey, 3½ mi nw Pettus. **Means of Discovery:** Geological information based on several dry holes drilled in immediate area. Drilling along trend fault. **Extent of Development:** Three failures drilled to Pettus sand prior to Jan. 1, 1936. Two failures drilled 1936. Severy et al's J. E. Copeland 1 showed 350 lbs gas pressure on drill stem. 3420-71 ft, plugged back, set 7-in 3523 ft and perforated 3465-71 ft, resulting in salt water. Eden Oil Co.'s J. E. Copeland 1, drilled to 3596 ft, abnd.

COSDEN

John Pace, George Kerr Surveys, 1 mi w Pettus. **Discovery Well:** Cosden Oil Co.'s McKinney 1, June 1, 1930, flowing 270 bbls 45.5 gravity oil and 500,000 cu ft gas; 400 lbs casing pressure; total depth 3677 ft; 6⅝-in casing set 3654 ft; sand 3659-77 ft; elev 392 ft. **Means of Discovery:** Geological information, attempt to extend Pettus field west. **Type Structure:** Faulting and folding, small producing structure. **Producing Formation, Depth and Gravity:** Pettus sand in Cockfield, 3600 ft, 45.5 gravity. **Producing Area:** 185 acres, 85 acres in oil. **Extent of Development:** To Jan., 1937, 19 wells, 10 oil, 3 gas, 6 failures. During 6 months 1937: 1 failure. **Deepest Test:** Rowan & Tong's J. M. Freeland 1, 4536 ft, dry. **Estimated Ultimate Recovery:** Included in Pettus. **Production Through 1936:** Included in Pettus. **Indicated Remaining Reserve:** Included in Pettus. **Daily Production July 1, 1937:** Included in Pettus. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Barnsdall Oil Co., Sun Oil Co., Cosden Oil Co., Batex Oil Co., Houston Oil Co., Hartendorf-Cleveland, Illinois Petroleum Co.

DASH*

Butler Subd of J. M. Thurston Sur., 2 mi sw of Burnell. **Means of Discovery:** Geological information, subsurface correlations and surface indications. Shallow gas wells. **Extent of Development:** Dash Production Co.'s B. B. Ruhman 1, Dec. 21, 1933, in the upper Cockfield of Jackson series, about same place in section as upper portion of Pettus sand. Initial production 10,000,000 cu ft gas and 35 bbls 35 gravity oil per day, 5/16-in choke, total depth 3202 ft; 850 lbs tubing, 990 lbs casing pressure; sand 3176-3195 ft; pressure increased and oil flow was cut to practically nothing. Several other tests failed to develop production.

DIRKS

Section 7, J. M. Uranga Grant, G. B. Young, T. J. Butler, M. O'Brien, J. W. Young, T. P. Rawlins, J. L. Bugat Surveys, 5 mi sw Pettus. **Discovery Well:** Dirks Bros.' J. E. Roth 1, Dec. 23, 1934, 286 bbls oil, ¼-in choke, 225 lbs tubing, 550 lbs casing pressure, total depth 3884 ft, producing horizon 3882-84 ft. **Means of Discovery:** Geological, a trend play. **Type Structure:** Sand lensing, faulting and folding trending ne-sw. **Producing Formation, Depth and Gravity:** Pettus in Cockfield, 3900 ft, 47.5 gravity. **Producing Area:** 820 acres. **Extent of Development:** To Jan. 1, 1937, 114 wells, 104 oil, 10 failures. During 6 months 1937: 1 failure. **Deepest Test:** Mills Bennett's Mrs. Wm. Rapp 3, abnd 4773 ft in Yegua Oct, 1935. **Estimated Ultimate Recovery:** 8,600,000 bbls. **Production Through 1936:** 2,456,090 bbls. **Indicated Remaining Reserve:** 6,143,910 bbls. **Daily Production July 1, 1937:** 3675 bbls. **Oil Outlets:** Atlantic Pipe Line Co., Pettus Refining Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Dirks-McMurray, Heyser-Head & Walton, Humble Oil & Refining Co., Mills Bennett Prod. Co., Illinois Petroleum Co., Sun Oil Co., Devonian Oil Co., The Texas Co., Dirks-Wrightman Co., Wrightman Oil Co., Kleiner & Hill.

FOLEY

Keeler Survey, 4½ mi w Normanna. **Discovery Well:** Dirks Bros.' Foley 1, Feb. 8, 1935, 25,000,000 cu ft gas and spraying 38 bbls distillate per day, ¼-in choke, 1000 lbs tubing, 1250 lbs casing pressure; total depth 3445 ft, producing horizon 3404-45 ft, elev 415 ft derrick floor. Subsequent discoveries since July 1, 1936: Siznod Oil Corp.'s A. M. Holzmark 1, Oct. 7, 1936, total depth 4101 ft, sand 4081-4101 ft, flowed 42 bbls 46 gravity oil per day, ⅛-in choke, tubing 1050 lbs, casing pressure 1500 lbs. **Means of Discovery:** Geological prospect. **Type Structure:** Sand lensing against fault. **Producing Formation, Depth and Gravity:** Hockleyensis of Jackson age, 3450 ft, wet gas; Pettus of Cockfield, 4100 ft, 46 gravity. **Producing Area:** 120 acres, 50 in oil.

Extent of Development: To Jan. 1, 1937, 7 wells, 4 oil, 1 gas, 2 failures. During 6 months 1937: 2 wells, 1 oil, 1 failure. **Deepest Test:** Fox-Heflin's A. M. Holymark 1, abnd 4146 ft in Yegua. **Estimated Ultimate Recovery:** 500,000 bbls. **Production Through 1936:** 3688 bbls. **Indicated Remaining Reserve:** 296,312 bbls. **Daily Production July 1, 1937:** 45 bbls. **Oil Outlets:** Small gas pipe line to Dirks area; Pettus Refining Co. oil line. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Dirks Bros., Grady Kirby, Fox-Heflin, Miller-Donzes Oil Co., Texas Prospecting Co.

GRAYBURG

Centering around Stephen Winship Survey, 1 mi n Mineral. **Discovery Well:** Grayburg Oil Co.'s A. J. Kimball 1, June 19, 1930, 200 bbls 34.6 gravity oil per day, 3553 ft, elev 370 ft (made salt water shortly after completed and abnd). **Means of Discovery:** Geological information, evidence of faulting. **Type Structure:** Small structure cut by several faults. **Producing Formation, Depth and Gravity:** Pettus of Cockfield, Jackson age, 3550 ft, 34.6 gravity. **Producing Area:** 50 acres. **Extent of Development:** To Jan. 1, 1937, 18 wells, 3 oil, 15 failures. During 6 months 1937: None. **Deepest Test:** Grayburg Oil Co.'s A. C. Billingsley 1, abnd 4800 ft. **Estimated Ultimate Recovery:** 20,000 bbls. **Production Through 1936:** 18,871 bbls. **Indicated Remaining Reserve:** 1129 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Truck oil to local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Majority of acreage open. Worth Oil Co., Mid-Continent Crude Oil Co.

HICKS‡

J. M. Uranga Grant, 4½ mi nw Normanna. **Discovery Well:** H. A. Pressy et al's R. T. Hicks 1, July 27, 1936, 450 lbs rock pressure, total depth 3568 ft, producing horizon 3482-3502 ft, set 5-in casing on bottom, perforated 3482-87 ft completed, 10,000,000 cu ft gas, elev 340 ft, derrick floor. Reworked and made some oil 3/16-in choke, tubing 350 lbs, casing 450 lbs. **Means of Discovery:** Trend play and geophysical information. **Type Structure:** Closure against fault. **Producing Formation, Depth and Gravity:** Hockleyensis, 3480 ft, 37 gravity. **Producing Area:** 20 acres, none in oil. **Extent of Development:** To Jan. 1, 1937, 1 well, 1 gas well. During 6 months 1937: None. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** Gas field, oil production negligible. **Production Through 1936:** Gas. **Indicated Remaining Reserve:** Gas. **Daily Production July 1, 1937:** Gas field. **Outlet:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Magnolia Petroleum Co., Continental Oil Co., Tide Water Oil Co., Humble Oil & Refining Co., H. A. Pressy, Dougherty et al. **Remarks:** Well shut in, made only small amount of oil, no other development.

HOLZMARK‡

James A. York and Lyford Surveys, 4 mi sw Normanna. **Discovery Well:** Simms Oil Co.'s Holzmark 1, Sept. 7, 1930, 50,000,000 cu ft wet gas, 1600 lbs rock pressure, 900 lbs working pressure on open 4-in line, total depth 3552 ft, sand 3535-48 ft, shale 3548-52 ft. **Means of Discovery:** Geological information. **Type Structure:** Lensing, folding and faulting. **Producing Formation, Depth and Gravity:** Upper portion of Hockleyensis in Jackson series, 3550 ft, distillate. **Producing Area:** 25 acres. **Extent of Development:** To Jan. 1, 1937, 5 wells, 2 gas, 3 failures. During 6 months 1937: None. **Deepest Test:** Simms Oil Co.'s Holzmark 2, 4458 ft, plugged back 3512 ft and completed as gasser. **Estimated Ultimate Recovery:** Gas field. **Production Through 1936:** Gas. **Indicated Remaining Reserve:** Gas. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Tide Water Associated Oil Co.

MORGAN RANCH*

J. Brown and Henry Eyles Surveys, 10 mi se Beeville. **Means of Discovery:** Considerable geological and geophysical work has been done in this general territory, and information obtained from both sources indicate several highs in this immediate sector. **Extent of Development:** Phillips Petroleum Co., Moody-Seagraves & Independent Oil & Gas Company, drilled several 6000-ft tests in the general area, but failed to develop production, although interesting showings were encountered. Independent and Moody-Seagraves well on Welder land had oil sand at 4360-66 ft. Well was near center of Eyles Survey. Top of Fayette about 4450 ft, top Hockleyensis just below 5000 ft. Phillips Petroleum Co.'s T. P. Morgan 1, abnd at 6697 ft, Dec. 1, 1934, had several oil shows.

NORMANNA

Central portion J. M. Uranga Grant, 1 mi sw Normanna. **Discovery Well:** C. F. Nichols' Hicks Hahl 2, Dec. 10, 1929, 1,500,000 cu ft dry gas per day, 1920 ft. **Means of Discovery:** Geological information. **Type Structure:** Structure of limited area, cut by faulting and steep dipping. **Producing Formation, Depth and Gravity:** Frio, 1900 ft, gas; Hockleyensis, 3650 ft, 38.5 gravity. **Producing Area:** 80 acres, 40 acres oil. **Extent of Development:** To Jan. 1, 1937, 13 wells, 4 oil, 2 gas, 7 failures. During 6 months 1937: None. **Deepest Test:** Wm. F. Morgan's W. L. Demory 1, abnd 5050 ft, Jan. 6, 1934. **Estimated Ultimate Recovery:** 65,000 bbls. **Production Through 1936:** 39,363 bbls. **Indicated Remaining Reserve:** 25,637 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Nichols & Doherty, Morgan & Doherty, The Texas Co., Jas. R. Dougherty, Nichols Oil Corp.

PETTUS

Pierce Miller, Thomas Hanson, L. C. Randolph, G. A. Kerr Surveys, including Pettus townsite and area ne. **Discovery Well:** Mission Drilling Co.'s George A. Ray 2, April 30, 1929, 20,000,000 cu ft gas, total depth 3902 ft; producing horizon 2815-2902 ft, elev 382 ft. **Means of Discovery:** Geological information led to

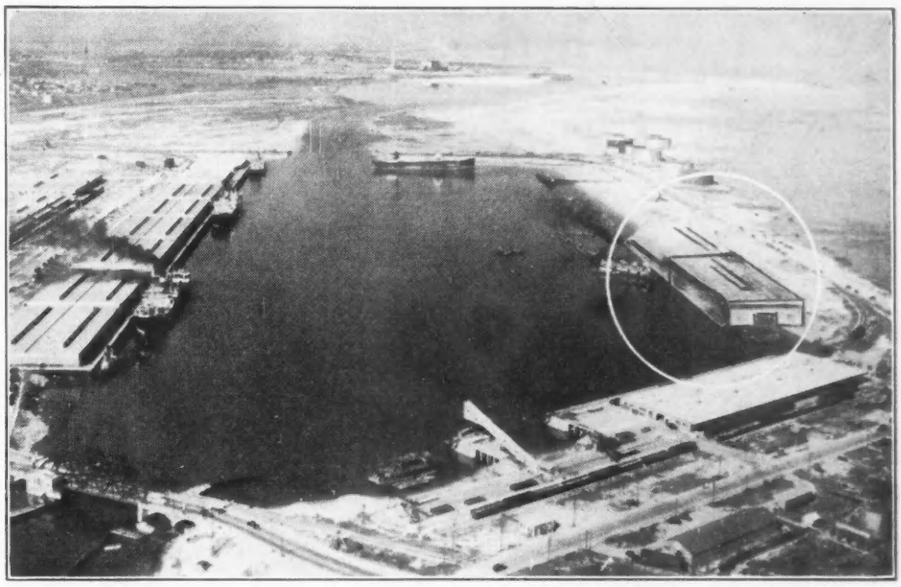
* Prospect. †Salt dome, no production. ‡Gas field.

Oil Port for South Texas Empire

THE PORT OF CORPUS CHRISTI has been a potent factor in the transition of Corpus Christi from a city with a purely agricultural background into one pulsating with industrial activity. Less than three years ago it became the Southwest's industrial frontier. It is now the Oil Capital of the South Texas empire.

Into the properties of the Navigation District, administered by a commission of three men who, through the Director of the Port, operate the Port for public benefit, come twenty-three pipe lines, bringing crude oil from a hundred or more fields, every one of which is within a few hours ride of Corpus Christi.

In the area Corpus Christi regards as its own there are 123 fields with 6,183 wells, having a daily allowable of 232,333 barrels of oil (as of Aug. 1, 1937). And



Two of the Port's oil docks are located in the main turning basin shown above. The circle shows the location of two new cargo docks now under construction.

millions of barrels of it seek a market through the Port of Corpus Christi, or its divisions. In the fiscal year ending June 30, for instance, 55,887,035 barrels of crude and refined oil moved over the Navigation District's docks, and those at Harbor Island and Ingleside.

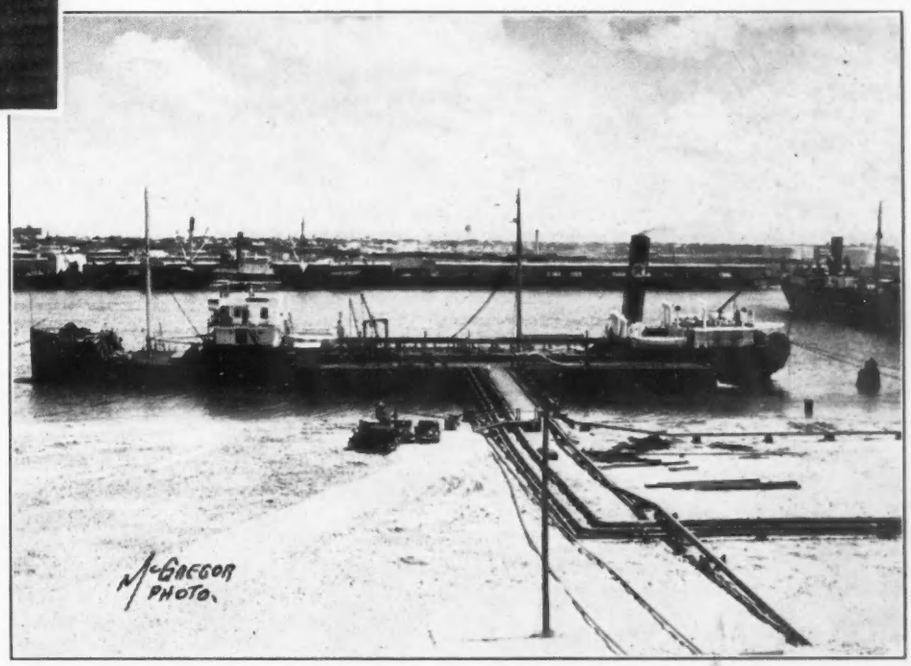
The harbor's facilities are geared to serve the trade effectively. Three oil docks, with 33-foot water depths, are operated. Adequate loading lines facilitate quick clearance.

Although several major oil companies have private terminals upon or near the Port's two turning basins, producers without privately-owned facilities will find public terminals adequate to accommodate them. One concern can handle up to 1,000,000 barrels of liquid commodities of a diversified nature.

A considerable refining industry is now in operation here. Seven plants are functioning. Another, located upon the industrial canal, is being erected by the Barnsdall Oil Company. At this time about 60,000 barrels of crude can be run daily. The future for the refining industry is bright, as a ready market is at hand.

Manufacturers making items for sale to the oil industry will find Corpus Christi's adjacent territory a fertile market for their wares. Coastwise, intercoastal and barge line services make Corpus Christi accessible to the steel centers of the nation. At this time about 40 distributors of oil field supplies are operating here. A few years ago there were none.

If the Port of Corpus Christi can serve you, a letter to the Nueces County Navigation Commission, Corpus Christi, Texas, will bring you information on desired subjects.



Above: Pipe for South Texas oil fields moves through Corpus Christi. At right—A tanker loading oil at No. 2 oil dock.

completion of gas wells. Oil wells followed after shallow gas indicated structural high. **Type Structure:** Sand lensing body backed up against several faults. Sand up to 30 ft thick in portions of field. **Producing Formation, Depth and Gravity:** Whitsett of Jackson age, 2950 ft, gas; Pettus in Cockfield, 3900 ft, 45 gravity. **Producing Area:** 850 acres, 510 acres oil. **Extent of Development:** To Jan. 1, 1937, 73 wells, 49 oil, 11 gas, 13 failures. During 6 months 1937: None. **Deepest Test:** United Production Corp.'s G. A. Ray 39, total depth 7569 ft, plugged back 3936 ft, completed as oil producer Dec. 28, 1932. **Estimated Ultimate Recovery:** 9,850,000 bbls. **Production Through 1936:** 7,970,842 bbls. **Indicated Remaining Reserve:** 9,850,000 bbls. **Daily Production July 1, 1937:** 1150 bbls. **Oil Outlets:** Houston Oil Co., Humble Pipe Line Co., Atlantic Pipe Line Co., local refineries. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Houston Oil Co., Humble Oil & Refining Co., United Production Corp., S. R. & C. Oil Corp., Glasscock Bros., G. W. McMurray Drilling Co., Pettus Oil & Refining Co., Transwestern Oil Co., B. R. Smith, trustee.

PLUMMER

Plummer subdivision, Chessman Survey, 5 mi sw Caeser. **Discovery Well:** F. P. Hynes et al's Theo. M. Plummer 1-A, Aug. 31, 1935, 20,000,000 cu ft gas per day, ¼-in choke, 1225 lbs tubing, 1228 lbs casing pressure, total depth 2988 ft, producing horizon 2975-88 ft, elev 356 ft derrick floor. **Means of Discovery:** Trend drilling, geological data. **Type Structure:** Sand lens against fault. **Producing Formation, Depth and Gravity:** Pettus in Cockfield, 3000 ft, 32.5 gravity. **Producing Area:** 80 acres, 50 acres oil. **Extent of Development:** To Jan. 1, 1937, 6 wells, 1 oil, 1 gas, 4 failures. During 6 months 1937: 5 wells, 4 oil, 1 failure. **Deepest Test:** El Toro Oil Co.'s W. A. Robertson 2, abnd July 1, 1937, 3113 ft; Pettus sand 3070-77 showed oil, gas and sw. **Estimated Ultimate Recovery:** 360,000 bbls. **Production Through 1936:** Gas. **Indicated Remaining Reserve:** 360,000 bbls. **Daily Production July 1, 1937:** 50 bbls. **Oil Outlet:** Logo Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** D. C. Smith, Chas. A. Daubert, F. P. Hynes, The California Co., Magnolia Pet. Co., Melville et al, Ann Oil Co., W. C. McBride, Inc., El Toro Oil Co.

RAY

W. B. Blanchard, Brooks & Burleson Surveys, Section 21 of J. M. Uranga grant, 8 mi sw Pettus. **Discovery Well:** Jamison & Byron et al's P. L. Campbell 1, Mar. 29, 1935, 201 bbls oil, 3/16-in choke, 460 lbs tubing, 570 lbs casing pressure, total depth 3960 ft, producing horizon 3956-60 ft, elev 342 ft derrick floor. **Means of Discovery:** Trend drilling. **Type Structure:** Sand lens against faulting, trending ne-sw. **Producing Formation, Depth and Gravity:** Pettus of upper Cockfield, 3950 ft, 47 gravity. **Producing Area:** 480 acres. **Extent of Development:** To Jan. 1, 1937, 60 wells, 56 oil, 4 failures. During 6 months 1937: 1 failure. **Deepest Test:** Rawlins et al's P. L. Campbell 1, abnd 4525 ft. **Estimated Ultimate Recovery:** 3,850,000 bbls. **Production Through 1936:** 933,337 bbls. **Indicated Remaining Reserve:** 2,916,663 bbls. **Daily Production July 1, 1937:** 1040 bbls. **Oil Outlet:** Atlantic Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Simms Oil Co., Stanolind Oil & Gas Co., Highland Oil Co., Dirks Bros. et al, Jamison & Byron, Magnolia Petroleum Co., L. L. Moore, H-Y Oil Co., Kleiner et al, Tide Water Associated Oil Co., N. V. Duncan, James P. Nash, tr., Sunburst Oil Co., J. R. West et al, Wood & Young.

RUTLEDGE

B. Q. Hadley Survey, Abst. 201, 2 mi ne Mineral. **Discovery Well:** Worth Oil Co.'s Rutledge 1-A, May 1, 1935, 90 bbls, 33.2 gravity oil, 5/16-in choke, 1150 lbs tubing, 1240 lbs casing pressure, total depth 3394 ft, producing horizon 3386-94 ft, elev 390 derrick floor. **Means of Discovery:** Trend drilling, geological data. **Type Structure:** Small sand lens against fault. **Producing Formation, Depth and Gravity:** Pettus sand of Cockfield, 3400 ft, 33.2 gravity. **Producing Area:** 15 acres. **Extent of Development:** To Jan. 1, 1937, 11 wells, 2 oil, 9 failures. During 6 months 1937: None. **Deepest Test:** L. W. Stieren's W. N. Fox 1, abnd 3585 ft in Yegua. **Estimated Ultimate Recovery:** 24,500 bbls. **Production Through 1936:** 16,903 bbls. **Indicated Remaining Reserve:** 7597 bbls. **Daily Production July 1, 1937:** 15 bbls. **Oil Outlet:** Truck oil to local markets. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Worth Oil Co., Sun Oil Co., Stanolind Oil & Gas Co., Humble Oil & Refining Co., L. W. Stieren.

SOUTHWEST PETTUS

John W. Williamson, John Pace, George Kerr and A. Smalley Surveys, 1 mi sw Pettus. **Discovery Well:** J. M. Davis et al's George A. Ray 1, July 18, 1931, 380 bbls 45 gravity oil, ¼-in choke, 50 lbs tubing, 250 lbs casing pressure, total depth 3925 ft, producing horizon 3920-25 ft, elev 327 ft, 6⅝-in casing set 3919 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing structure, similar to main Pettus field, faulting however, definitely divides two areas. **Producing Formation, Depth and Gravity:** Pettus, Cockfield, 3925 ft, 45 gravity. **Producing Area:** 160 acres. **Extent of Development:** To Jan. 1, 1937, 26 wells, 19 oil, 7 failures. During 6 months 1937: None. **Deepest Test:** H. H. Weinert and C. R. & M. Drilling Co.'s George Ray 1, abnd 4527 ft, 1931. **Estimated Ultimate Recovery:** Included in Pettus. **Production Through 1936:** Included in Pettus. **Indicated Remaining Reserve:** Included in Pettus. **Daily Production July 1, 1937:** Included in Pettus. **Oil Outlets:** Local refineries—Humble Pipe Line Co., Atlantic Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Houston Oil Co., J. L. Maudlin, Transwestern Oil Co., B. R. Smith, Pettus Oil & Ref. Co.

STRAUCH

J. M. Uranga Grant, Section 19, 1½ mi nw Normanna. **Discovery Well:** Dirks Bros.' Tom Strauch 1, Mar. 20, 1937, 230 bbls 47 gravity oil per day through 3/16-in choke, tubing 570 lbs, casing pressure 920 lbs, sand 4267-75 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth and Gravity:** Yegua, 4275 ft, 47 gravity. **Producing Area:** 30 acres. **Extent of Development:** To Jan. 1, 1937, no wells. During 6 months, 1937: 6 wells, 2 oil, 4 failures. **Deepest Test:** Dirks Bros.' D. Sinclair 1, abnd 4368 ft, April 18, 1937, after testing oil and salt water in Yegua. **Estimated Ultimate Recovery:** 150,000 bbls. **Production Through 1936:** New field, none. **Daily Production July 1, 1937:** 60 bbls. **Oil Outlet:** Atlantic Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Dirks Bros., Sizned Oil Corp., Sun Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

THOMPSON RANCH*

Wm. Burk, Garrett Roach, M. de los Santos Surveys, 12 mi e Skidmore. **Means of Discovery:** Likely a geophysical prospect in as much as considerable work was done in this immediate area, and big block taken by Humble Oil & Refining Co. **Extent of Development:** Four wells drilled. Humble and Hulburt's Chestnut 1, abnd in 1930 at 5008 ft. Humble's Thompson 1 was drilled later to 6160 ft and abnd. Humble's Thompson 2 abnd June 25, 1935, 5987 ft. It had gas and oil sand 3984-4008 ft but showed salt water and 65 lbs on drill-stem test. Another drill-stem test at 4850-84 ft showed 300 ft oil and salt water and 350 lbs pressure. Heavy gas show at 5354-5405 ft. Humble's J. C. Wood 1, abnd 5128 ft July 16, 1935.

TULETA

Sections 2, 3, 12 and 13, J. M. Uranga grant, 1 mi e Tuleta. **Discovery Well:** C. F. Nichols' J. P. Harris 1, July 21, 1932, 450 bbls, 45.5 gravity oil, ⅝-in choke, 425 lbs tubing, 825 lbs casing pressure, total depth 4095 ft, producing horizon 4087-95 ft, elev 334 ft derrick floor. **Means of Discovery:** Geological information. **Type Structure:** Small sand lensing proposition with the dip to the east. **Producing Formation, Depth and Gravity:** Pettus, 4100 ft, 45.5 gravity; Yegua, 4300 ft, 44 gravity; 4400 ft, 43.9 gravity. **Producing Area:** 160 acres, 90 acres oil. **Extent of Development:** To Jan. 1, 1937, 21 wells, 10 oil, 3 gas, 8 failures. During 6 months 1937: None. **Deepest Test:** Clymore & Grisham's Rapp & Hatch 1, abnd in Yegua 4418 ft. **Estimated Ultimate Recovery:** 150,000 bbls. **Production Through 1936:** 146,500 bbls (estimated). **Indicated Remaining Reserve:** 3500 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Pettus Ref. Co., local plants. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** C. F. Nichols, Dirks Brothers, Trio Oil Co., Conservative Oil Co.

VOSS

Samuel May Survey, 3 mi e Mineral. **Discovery Well:** R. B. Swiger (later Devonian Oil Co.), C. A. Voss 1, June 21, 1936, 98 bbls 47 gravity oil per day, tubing pressure 250 lbs, casing 450 lbs, ¼-in choke, total depth 4019 ft, producing horizon 4015-19 ft, 7-in casing set 4015 ft. **Means of Discovery:** Trend play along fault. **Type Structure:** Sand closure against ne-sw fault. **Producing Formation, Depth and Gravity:** Pettus sand Cockfield, 4000 ft, 47 gravity. **Producing Area:** 70 acres. **Extent of Development:** To Jan. 1, 1937. 12 wells, 7 oil, 5 failures. During 6 months 1937: None. **Deepest Test:** Dirks Bros.' M. M. Bergel 1, abnd in Yegua, July 7, 1936, 4306 ft. **Estimated Ultimate Recovery:** 550,000 bbls. **Production Through 1936:** 4403 bbls. **Indicated Remaining Reserve:** 545,597 bbls. **Daily Production July 1, 1937:** 145 bbls. **Oil Outlet:** Pettus Refining Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Humble Oil & Refining Co., Dirks Bros., Tide Water Oil Co., Devonian Oil Co., F. W. & G. A. Weigand.

WEISS‡

B & B Survey, Abst. 130, 4 mi sw Pettus. **Discovery Well:** E. S. Price et al's Weiss 1, 1930, 31,000,000 cu ft gas per day, spraying gasoline, total depth 4415 ft, elev 319 ft, sand 4411-15 ft. **Means of Discovery:** Geological data. **Type Structure:** Sand lensing against fault. **Producing Formation, Depth and Gravity:** Upper Yegua, 4400 ft, clean distillate. **Producing Area:** 40 acres. **Extent of Development:** To Jan. 1, 1937, 5 wells, 2 gas, 3 failures. During 6 months 1937: No wells completed. **Deepest Test:** E. S. Price et al's Weiss 2, 4553 ft, abnd 1931. **Estimated Ultimate Recovery:** Gas field. **Production Through 1936:** Gas. **Indicated Remaining Reserve:** Gas. **Daily Production July 1, 1937:** Gas. **Outlet:** Small amount of gasoline, delivered to local refinery. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** J. R. Dougherty et al, Weekly Oil Co.

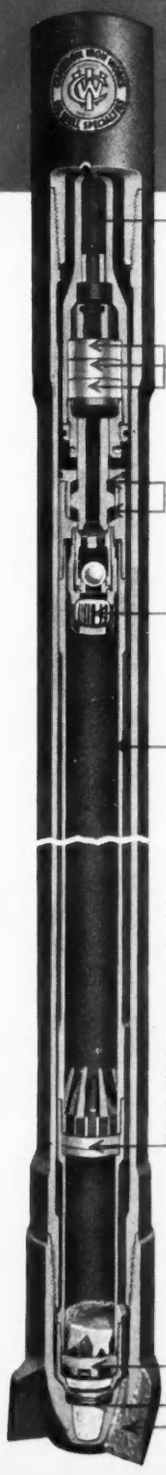
WEST TULETA

Sections 5, 6, 10, 9, 8, 20 and 21 of J. M. Uranga Grant, 1 mi w Tuleta. **Discovery Well:** Dirks Bros.' Skinner-Harris 1, June 12, 1934, 75 bbls 47.2 gravity oil and 20,000,000 cu ft gas per day, 1240 lbs casing pressure, total depth 3973 ft, producing horizon 3950-62, 7-in casing set 3950 ft. **Means of Discovery:** Geological information subsurface correlations on failures drilled on east flank of structure. **Type Structure:** Sand lensing and folding trending northeast and southwest, considerable faulting. **Producing Formation, Depth and Gravity:** Pettus upper Cockfield, 3900 ft, 47 gravity; Whitsett, Jackson age, 3000 ft. **Producing Area:** 1050 acres, 920 acres oil. **Extent of Development:** To Jan. 1, 1937, 103 wells, 90 oil, 2 gas, 11 failures. During 6 months 1937: 3 wells, 2 oil, 1 failure. **Deepest Test:** Edwin M. Jones' Rapp 1, abnd July 31, 1930, 6062 ft. **Estimated Ultimate Recovery:** 6,250,000 bbls. **Production Through 1936:** 1,246,637 bbls. **Indicated Remaining Reserve:** 5,003,363 bbls. **Daily Production July 1, 1937:** 640 bbls. **Oil Outlets:** Atlantic Pipe Line Co., Pettus Refining Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Blanco-Buchanan Oil Co., Heyser-Heard Walton, Houston Oil Co., Mills-Bennett, Tuleta Oil Corp., Cosmo Petroleum Co., Jennings & Moore, J. M. White, Receiver, Salt Dome Oil Corp.

Some of the reasons why

CAMERON TYPE "C" ROTARY CORE BARREL

dominates in the Gulf Coast



BEARING HOUSING SUB provides a grease-packed housing for the three angular contact bearings, protecting them against damage by abrasive-laden drilling fluid.

INNER BARREL REMAINS STATIONARY while core is being cut—due to friction-less suspension on three angular contact bearings. Cores recovered exactly as they laid in the formation—unconglomerated, unpacked, uncontaminated.

RUBBER ALIGNING WASHERS provide a self-aligning resilient mounting for inner barrel—absorbing shocks and permitting nominal "Weaving" under uneven stresses.

LARGE STRAINER AND BALL CHECK ASSEMBLY permit barrel to relieve itself of drilling fluid easily as core enters.

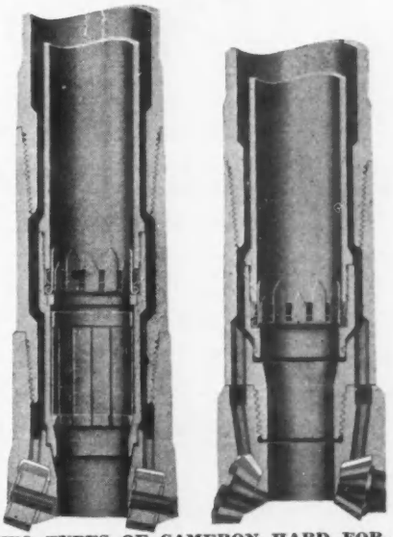
ONE-PIECE SEAMLESS STEEL INNER BARREL. Burning and jamming of cores eliminated by increased inside diameter provided at each thread connection (at points where core catchers are installed).

REPLACEABLE SPRING TYPE SOFT FORMATION CORE CATCHER which has proved exceptionally efficient in retaining cores of the softest sands.

BASKET TYPE CORE CATCHER which has proved itself equally serviceable in retaining both hard and soft cores.

RETAINER COLLAR WITH "SLUSH RING" which admits precisely the correct amount of drilling fluid into inner barrel to lubricate core. Slush coating also forms a bond for soft, unconsolidated formations.

SOFT FORMATION CORE HEAD. Precision dressing and redressing of Cameron Core Heads in our shops contributes heavily to consistent 100% recovery in soft formations. Replaceable gauge and wear bushings are changed whenever wear exceeds 1/32" on the side. Exacting care in this work assures proper core diameter, and proper tolerance between core head and Inner Barrel Retainer Collar.



TWO TYPES OF CAMERON HARD FORMATION ADAPTERS which permit the use of standard makes of Roller Type Hard Formation Cutter Heads. Use of an adapter on a Cameron Type C Rotary Core Barrel assures high percentage recoveries in the hardest formations.

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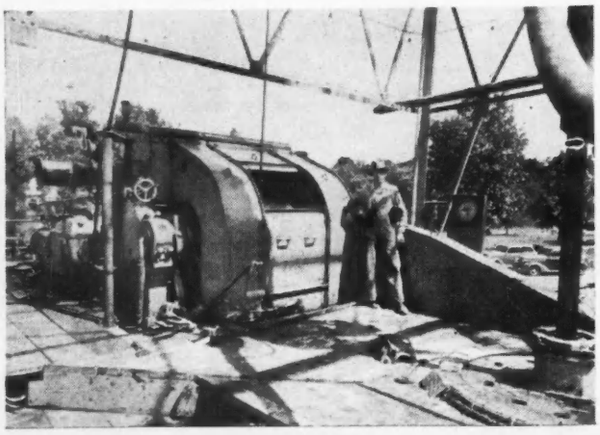
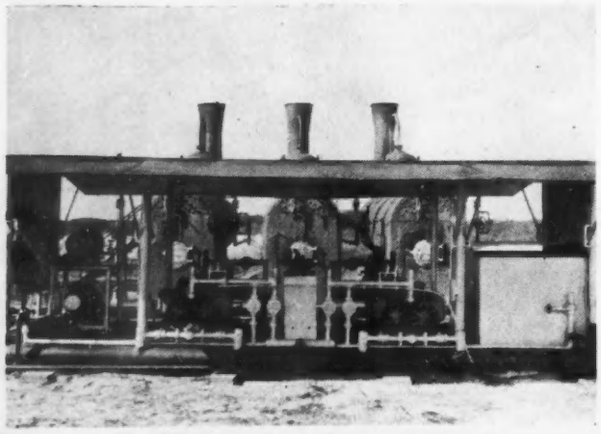


STEAM DRILLING RIGS
DIESEL DRILLING RIGS



ALLEN & MORRIS
Alamo National Building
SAN ANTONIO

BEE-GOLIAD COUNTIES

GEORGE RAY RANCH*

Centering around W. A. Moore, G. Neil, J. Gomez, E. Ray, A. B. & M. G. A. Ray and P. G. Millikin surveys, on both sides of Blanco Creek, 2 mi e Pettus field. **Means of Discovery:** Trend drilling with original Pettus gas field and showings in various wells. **Extent of Development:** 11 wells have been drilled. Dr. Hewitt et al's G. A. Ray abnd at 4375 ft with shows. Union Producing Co.'s G. A. Ray 3, drilled in 1929, really discovery well of field, finding small production in the Pettus around 4000 ft and deepening to below 6000 ft. It produced for a while, was reworked, but abnd. Union Producing Co. (later United Production Corp.) drilled 10 wells in the area, finding oil, gas or salt water with shows of oil and gas in every well. G. A. Ray 11 blew out June 23, 1930, at 3812 ft, ran wild and wrecked derrick and rig. It made only dry gas.

BEXAR COUNTY

ADKINS*

Centering around J. Pena survey, 1½ mi se Adkins. **Means of Discovery:** Surface indications. **Extent of Development:** About 19 wells have been drilled, 7 of which made very small producers in the Navarro sands around 600 ft. McClanahan et al's E. Shadrock 1 was drilled to the Edwards lime and abnd at 2008 ft after showing sulphur water. Only a limited amount of oil has been produced and marketed.

ALTA VISTA

J. Manuel Urriegas, J. Wilson surveys, 10 mi s San Antonio. **Discovery Well:** First production about 1912 from shallow sands 220-250 ft with very small pumpers. Several years later Austin chalk production was established just below 1000 ft, one well making 150 bbls per day. Oil ranged upward from 14 gravity. **Means of Discovery:** Geological information, surface indications. **Type Structure:** Sand lensing, faulting, part of production from crevice. **Producing Formation, Depth and Gravity:** Navarro, 250 ft, 14 gravity; Austin chalk, 1100 ft, 16 gravity. **Producing Area:** 280 acres, all in oil. **Extent of Development:** To Jan. 1, 1937, 89 wells; 58 oil, 4 gas, 27 failures; During 6 months 1937: none. **Deepest Test:** 4535 ft; abnd in Trinity. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** 104,121 bbls. **Indicated Remaining Reserve:** 15,879 bbls. **Daily Production July 1, 1937:** 4 bbls. **Oil Outlet:** By truck to local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** B. A. Dreibrodt.

COFFEY

F. Rodriguez sur, 10 mi s San Antonio. **Discovery Well:** I. L. Dingman and Russell Leasing Co.'s R. J. Coffey 1, Mar. 7, 1934, 1,500,000 cu ft gas 1034 ft; producing horizon 1017-34 ft; elev 591 ft deepened to 1325 ft, pb, abd. **Means of Discovery:** Trend drilling on known fault. **Type Structure:** Faulted structure, production on upthrow side. **Producing Formation, Depth and Gravity:** Taylor marl at or near top of Austin chalk, 1050 ft, 12.9 gravity. **Producing Area:** 10 acres. **Extent of Development:** To Jan. 1, 1937, 12 wells; 1 oil, 1 gas well, 10 failures. During 6 months 1937: 1 oil well. **Deepest Test:** Joe Dupree's S. G. Winter 1, abnd 1853 ft; June 18, 1936; after testing sulphur water in Edwards lime topped at 1700 ft; elevation 581 derrick floor. **Estimated Ultimate Recovery:** 10,000 bbls. **Production Through 1936:** 1750 bbls. **Indicated Remaining Reserve:** 8250 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlet:** By trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Locke & Burton et al. **Remarks:** One well later developed 12.9 gravity oil in the same horizon; this field is between Alta Vista and Mission and likely connects them.

COOKSEY

J. W. Rialls survey, 15 mi e San Antonio. **Discovery Well:** Penn Oil Co.'s Cooksey 1, Oct. 18, 1930; 100 bbls. 35.8 gravity oil per day; total depth 1461 ft; producing horizon 1410-61 ft; elev 600 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand and shale producing formation, back up against ne-se faulting. **Producing Formation, Depth and Gravity:** Taylor marl series, 1500 ft, 36 gravity. **Producing Area:** 65 acres. **Extent of Development:** To Jan. 1, 1937; 21 wells, 14 oil, 7 failures; During 6 months 1937, none. **Deepest Test:** Penn Oil Co.'s Don Kosub 1 abnd 2259 ft, Dec. 19, 1930. **Estimated Ultimate Recovery:** 70,000 bbls. **Production Through 1936:** 69,666 bbls. **Indicated Remaining Reserve:** 334 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Trucked to Eckert field and run to Somerset through Pioneer Oil & Refining Co. line. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Chiquita Oil Co. **Remarks:** Field abandoned.

ECKERT

Includes P. L. Buquor, Gotari No. 5, No. 4, Juan Montez No. 52, and No. 4 surveys, 6 mi se San Antonio. **Discovery Well:** F. H. Eckert & Son's Paul Dobrowolski 1, Sept. 11, 1928, 6 bbls 35.4 gravity oil, 702 ft, elev 575 ft, sand 687-700 ft. **Means of Discovery:** Showings of oil in water wells. **Type Structure:** Sand lensing against several ne-sw faults, with minor cross faulting. **Producing Formation, Depth and Gravity:** Navarro sands, 700

* Prospect. †Salt dome, no production. ‡Gas field.

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ft, 35.4 gravity; Lower Taylor, near top of Austin chalk, 1060 ft, gas. **Producing Area:** 950 acres, 860 acres oil. **Extent of Development:** To Jan. 1, 1937, 168 wells, 135 oil, 7 gas, 26 failures; During 6 months, 1937, none. **Deepest Test:** F. H. Eckert & Son's A. C. Brehm 4; completed 1932, top Edwards Lime 1473 ft, drilled to 1516 ft and plugged to upper sand. **Estimated Ultimate Recovery:** 1,500,000 bbls. **Production Through 1936:** 749,787 bbls. **Indicated Remaining Reserve:** 751,213 bbls. **Daily Production July 1, 1937:** 192 bbls. **Oil Outlet:** Pioneer Oil & Refining Co.. **Rigs Running July 1, 1937:** Nine. **Principal Leaseholders:** Gatlin Oil Co., Rosate & Company, Alamo Natural Gas Company, Swearingen and White, Bowman & Richards, Eckert & Son, S. R. & C. Oil Corporation, etc. **Remarks:** Production developed just southwest of this field on Dullnig property shortly after 1900 at about 240 ft. Only a limited amount of oil was recovered from 4 wells and other tests drilled failed to produce in lower levels, such as regular sands of this field.

GAS RIDGE

M. F. Rodriguez, Francisco Rivas, F. F. Morales and Munos surveys, 3 mi sw San Antonio. **Discovery Well:** Meecham et al's Oliver 1, completed 1912, 850 ft, 12,000,000 cu ft gas. Shallow oil production developed in a few wells in a sand ranging from 300 to 500 ft. **Means of Discovery:** Geological information. **Type Structure:** Domal type structure, some faulting, and lensing. **Producing Formation, Depth and Gravity:** Midway, Navarro, Taylor, Austin chalk. **Producing Area:** 360 acres, 80 acres oil. **Extent of Development:** To Jan. 1, 1937, 114 wells, 18 oil, 82 gas, 14 failures; During 6 months 1937, none. **Deepest Test:** American Gas Co.'s Oliver 5, 3625 ft in Glenrose. **Estimated Ultimate Recovery:** 75,000 bbls. **Production Through** 1936: 59,131 bls. **Indicated Remaining Reserve:** 15,869 bbls. **Daily Production July 1, 1937:** 4 bbls. **Oil Outlet:** All by trucks to local market. United Gas System taking gas. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** United Gas System controls field and operating it, although leases held by others. A. W. Pausky, American Gas Co.

LONE OAK

J. M. Arocha grant, 16 mi e San Antonio. **Discovery Well:** Paul L. Meaders et al's W. Cantu 1, Oct. 1, 1934, pumping 25 bbls 33.4 gravity oil, total depth 2255 ft; elev 576 ft derrick floor; plugged back 1750 ft; 6⅝-in set 1435 ft; sands 1480-90 ft and 1612-20 ft. **Means of Discovery:** Geological information and trend drilling on known fault. **Type Structure:** Sand lens against faulting. **Producing Formation, Depth and Gravity:** Navarro-Taylor series, 1750 ft, 33.4 gravity. **Producing Area:** 10 acres. **Extent of Development:** To Jan. 1, 1937, 2 oil wells; During 6 months 1937, 1 failure. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 2500 bbls. **Production Through 1936:** 2391 bbls. **Indicated Remaining Reserve:** 109 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** By trucks to local markets. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** J. D. Collett, Humble Oil & Refining Co., Paul Meaders, L. B. Snider and Sid Roberts, Circle W Oil Co., Abercrombie and Harrison, Talbot Drilling Co., Landon & Straus, Mid-Continent Petroleum Co., C. L. Smith, W. D. Bacon.

MACDONNA

Jose M. Bacerro survey No. 58, 2 mi e Macdonna. **Discovery Well:** F. M. Shaver's A. W. Bitter 2, Aug. 2, 1936, pumping 5 bbls 39 gravity oil per day; total depth 1324 ft; producing horizon 476-521 ft; plugged back 521 ft; 8-in. casing 476 ft. **Means of Discovery:** Trend play. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Navarro, 525 ft, 39 gravity. **Producing Area:** 40 acres; 20 acres oil. **Extent of Development:** To Jan. 1, 1937, 5 wells, 2 oil, 1 gas, 2 failures. During 6 months 1937, 3 wells, 2 oil, 1 gas. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** Included in Von Ormy. **Production Through 1936:** Included in Von Ormy. **Indicated Remaining Reserve:** Included in Von Ormy. **Daily Production July 1, 1937:** 7 bbls. **Oil Outlet:** By trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Virginia Oil & Gas Co., C. E. Euton, J. O. Williams.

MISSION

On Leon Creek in F. Rodriguez, A. Navarro and I. Perez surveys, 12 mi s from San Antonio. **Discovery Well:** Frank Lynn's Fee 1; completed 1904; drilling for water encountered oil about 110 ft, later drilling developed production around 1000-1100 ft. **Means of Discovery:** Shallow well being drilled for water encountered oil. Deeper drilling developed other producing level. **Type Structure:** Faulting, northeast and southwest. **Producing Formation, Depth and Gravity:** Contact of Midway and Navarro, 100 ft, 32 gravity; Taylor, above top of Austin chalk, 1100 ft, 16 gravity. **Producing Area:** 275 acres; 200 acres oil. **Extent of Development:** To Jan. 1, 1937, 50 wells, 33 oil, 3 gas, 14 failures; during 6 months 1937: none. **Deepest Test:** Several Edwards limestone tests to around 2000 ft drilled in general area. **Estimated Ultimate Recovery:** 68,875 bbls. **Production Through 1936:** 65,875 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** None. **Oil Outlet:** By trucks to local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Open. **Remarks:** This field was abandoned in 1928, except for several very shallow wells which are pumped about once each week.

SOUTH VON ORMY*

Centering around Francisco Rolen League and Labor, survey No. 48, 1 mi s Von Ormy. **Means of Discovery:** Geological information and surface indications of faulting. **Extent of Development:** 26 wells have been drilled, several showing for small producers. Von Ormy Oil Co.'s E. B. Carruth 1 was completed Nov. 11, 1933; pumping 10 bbls 34 gravity oil per day from 784 ft, 10-in casing set 560 ft; sand logged 770-80 ft. Texas Petroleum Co.'s E. B. Carruth 1 was completed Aug. 16, 1934 as 250,000 cu ft gasser spraying some oil with 425 lbs pressure shut in, at 1183 ft, 6⅝-in casing was set to 530 ft. 4½-in liner set to 840 ft. The oil and gas was found in Navarro-Taylor series. Several wells were drilled into the Edwards between 1650-1800 ft.

THELMA*

Martinez survey, 1 mi w Thelma. **Means of Discovery:** Trend drilling on known fault. Several shows encountered in previously drilled wells. **Extent of Development:** Noble & Aiken's R. W. Devilbiss 1 abnd March 25, 1935, after showing considerable oil in base of Taylor marl and upper portion of Austin chalk. Sandy lime was encountered at 2214-58 ft, showing gas, and sandy lime with oil and gas from 2058-75 ft. Shale and lime with slight oil show at 2075-2222 ft and top of Austin chalk at 2022-32 ft. It bailed considerable oil, but was junked. Four other wells drilled since that time have failed to develop anything of interest.

VON ORMY

F. Rolen League and Labor, S. McCullough, Stephen Jett, James Simpson, J. M. Barrera surveys, centering around Von Ormy. **Discovery Well:** Wm. A. Biel's Fee 1, June 24, 1931, pumping 3 bbls 36 gravity oil; total depth 714 ft; producing horizon 709-14 ft, 6⅝-in casing 461 ft. **Means of Discovery:** Geological information and surface indications; faulting evidenced. **Type Structure:** Series of sand and sandy shale strikes backed up against small ne-sw fault. **Producing Formation, Depth and Gravity:** Navarro sand and shale, 700 ft, 36-39 gravity. **Producing Area:** 840 acres. **Extent of Development:** To Jan. 1, 1937: 88 wells, 65 oil, 5 gas, 18 failures. During 6 months, 1937: 11 oil wells. **Deepest Test:** A. J. Trawalter et al's Trawalter 2, 1615 ft, completed as fresh water well in Edwards lime May 1, 1934. **Estimated Ultimate Recovery:** 500,000 bbls. **Production Through 1936:** 55,282 bbls. **Indicated Remaining Reserve:** 444,718 bbls. **Daily Production July 1, 1937:** 157 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Nuswald Oil Co., Armoil Oil Co., Shadrock Oil Co., Wm. Stewart, Nick Marosis, Richcul Oil Co., J. C. Glass, Jim Beard.

YTURRI-SOUTHTON

J. de la Garza, J. Sandoval, Juan Montes surveys, 1 mi sw Southton. **Discovery Well:** San Antonio Oil Co.'s Yturria 1, May 11, 1922, at about 900 ft, 15 bbls 34 gravity oil; elev 545 ft. **Means of Discovery:** Geological information, trend play along series of surface fault. **Type Structure:** Faulting and sand lensing, sand approximately 10 ft thick. **Producing Formation, Depth and Gravity:** Navarro sand, 900 ft, 34 gravity. **Producing Area:** 850 acres. **Extent of Development:** To Jan. 1, 1937: 144 wells; 120 oil, 24 failures. During 6 months 1937, none. **Deepest Test:** Wm. H. Reynolds' Yturri 1 abnd 3852 ft. **Estimated Ultimate Recovery:** 680,000 bbls. **Production Through 1936:** 561,734 bbls. **Indicated Remaining Reserve:** 118,266 bbls. **Daily Production July 1, 1937:** 62 bbls. **Oil Outlet:** Pioneer Oil & Refining Co. line to Somerset. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** J. B. Cicero, Ginter Lange Oil Co., Rentex Oil Co., Salado Oil Co.

BROOKS COUNTY

ALTA MESA

Las Mestinas grant, 25 mi sw Falfurrias. **Discovery Well:** W. W. Jones' Fee 1, June 2, 1926, 2,000,000 cu ft gas, total depth 1220 ft; sand 1200-20 ft; elev 489 ft. **Subsequent Discoveries since July 1, 1936:** The California Company's Mrs. B. Garcia 1, Aug. 6, 1936, 8022 ft, sand 3022-47 ft, perforated casing 3024-28½ ft, 75 bbls 24 gravity per day through artificial lifting device. Plugged back to 2479 ft, and perforate 2459-77 ft, Sept. 9, 1936, 40 bbls of 24 gravity oil per day through artificial lifting device. Both levels are new sands. Standard of Texas' Mestina Oil & Gas Co. (Lease 1) 1, Jan. 20, 1937, flowed 353 bbls 25 gravity oil, 49 bbls bs & w 24 hours ½-in choke, tubing pressure 175 lbs; casing pressure 600 lbs. Sand 3574-88ft. **Means of Discovery:** Drilling fresh water wells, encountered gas showings and completed as a producer. **Type Structure:** Likely domal type structure, little information, indication of being a salt dome. **Producing Formation, Depth and Gravity:** Oakville, 1200 ft, gas; Catahoula, 2400 ft, 24 gravity; 3000 ft, 24 gravity; 3500 ft, 25 gravity. **Producing Area:** 450 acres, 270 acres oil. **Extent of Development:** To Jan. 1, 1937, 14 wells, 2 oil, 2 gas, 10 failures. During 6 months 1937; 9 wells, 7 oil, 1 gas, 1 failure. **Deepest Test:** The California Co.'s (Standard of Texas), Mrs. B. Garcia, 8022 ft; lost drill in hole, plug back and tested upper sands. **Estimated Ultimate Recovery:** 810,000 bbls. **Production Through 1936:** 9015 bbls. **Indicated Remaining Reserve:** 800,985 bbls. **Daily Production July 1, 1937:** 725 bbls. **Oil Outlet:** Standard of Texas line to railroad. **Rigs Running July 1, 1937:** 3. **Principal Leaseholder:** Standard Oil Company of Texas.

ALTA VERDE

G. C. & S. F. survey, 309, 312, 313, 436, 20 mi sw Falfurrias. **Discovery Well:** Dick Young et al's Wm. Singer 1, March 18, 1936; pumping 80 bbls 21.5 gravity oil; total depth 926 ft; producing horizon 916½-26 ft; 6⅝-in 915 ft. **Means of Discovery:** Surface geology; Humble Oil & Refining Co. and Shell Petroleum Corp. worked area with geophysical equipment, 1928-1929. **Type Structure:** Salt dome, structure cut by some fault. **Producing Formation, Depth and Gravity:** Caprock (Miocene), 900 ft, 21.5 gravity. **Producing Area:** 120 acres, 40 acres oil. **Extent of**

* Prospect. †Salt dome, no production. ‡Gas field.

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Development: To Jan. 1, 1937: 14 wells, 2 oil, 2 gas, 12 failures. During 6 months, 1937: 2 failures. **Deepest Test:** Southern Crude Oil Purchasing Co.'s Holbien Wormser 1, 5105 ft; elev 370 ft. **Estimated Ultimate Recovery:** 100,000 bbls. **Production Through 1936:** 2353 bbls. **Indicated Remaining Reserve:** 97,647 bbls. **Daily Production July 1, 1937:** 120 bbls. **Oil Outlet:** By trucks to local market. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Humble Oil & Refining Co., Dick Young, Ike Howeth, Fairway Production Co., Starr Development Co., Norden & Morris, J. M. Nash.

GYP HILL*

Centering around Section 331, several mi sw Falfurrias. **Means of Discovery:** Conceded as salt dome with gypsum, typical of salt dome cap-rock at surface. Dome is immediately south of a salt lake and is marked by surface high just south of this lake. **Extent of Development:** Only small amount of shallow drilling by Sun Oil Co., Producers Oil Co., The Texas Co., Ballard & Underwood, Pittsburg Oil Development Co.; 10 Wells drilled, on showing some oil. Texas Co.'s Lasater 3, deepest hole; abnd Dec. 6, 1927, 4878 ft, probably in Cockfield. Texas Gulf Producing Co.'s T. S. Proctoer 1, block 2, Sec 20, Los Olmos Y Loma Blanca survey, 2 mi s Falfurrias, drilled to 6028 ft in 1937; ran electric formation test and abnd.

PALO BLANCO‡

Palo Blanco de Maguellos Grant, Y Pena survey, nw part of county. **Discovery Well:** Houston Oil Co. and Shell Petroleum Corp.'s E. C. Lassiter 1, Sept. 22, 1929, 25,000,000 cu ft gas; spraying small quantity 45 gravity oil; total depth 4120 ft; producing horizon 4117-20 ft; elev 341 ft. **Means of Discovery:** Geological and geophysical information. **Type Structure:** Domal type structure, likely salt dome. **Producing Formation, Depth and Gravity:** Oakville, 1200 ft, gas; Jackson, 4100 ft, 45.5 gravity. **Producing Area:** 80 acres. **Extent of Development:** To Jan. 1, 1937: 9 wells, 1 oil, 3 gas, 5 failures. During 6 months 1937: none. **Deepest Test:** Houston Oil Co.'s Holbein-Wormser 1, abnd 6603 ft. This well was completed Jan., 1930, at 4138-50 ft, flowing 300 bbls 45.5 gravity oil with 10,000,000 cu ft gas per day on 7/8-in choke, but was drilled deeper. **Estimated Ultimate Recovery:** Gas. **Production Through 1936:** Gas. **Outlet:** No connections. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Houston Oil Co. of Texas, Shell Petroleum Corp., Allen & Morris, Pittsburg Petroleum Corp., Stanolind Oil & Gas Co., United Production Co.

CALDWELL COUNTY

BRANYON

John Neill, James Pinchback, D. Cooper, R. B. Jamison, J. R. Miller, and other surveys, 6 mi s Lockhart. **Discovery Well:** The Texas Co.'s (J. H. Butte) F. M. Branyon 1, Apr. 29, 1931, flowing 300 bbls 37 gravity oil per day, total depth 2244 ft, producing horizon 2241-44 ft. **Means of Discovery:** Geological information, trend drilling on known fault. **Type Structure:** Crevices and broken chalk against series of ne-sw faults. **Producing Formation, Depth and Gravity:** Austin chalk, 2066-2300 ft, 37 gravity, Edwards lime, 2400 ft, 36 gravity. **Producing Area:** 520 acres. **Extent of Development:** To Jan. 1, 1937, 53 wells, 28 oil, 25 failures. During 6 months, 1937: 91 wells, 84 oil, 7 failures. **Deepest Test:** Adams & Lyles' Kelly 1, abnd 2680 ft. **Estimated Ultimate Recovery:** 2,850,000 bbls expected from present proven area. **Production Through 1936:** 107,733 bbls. **Indicated Remaining Reserve:** 206,855 bbls. **Daily Production July 1, 1937:** 2840 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 19. **Principal Leaseholders:** L. M. Kniffin, Webster Oil & Gas Co., Lincoln Petroleum Co., Fred Adams, Blundell Oil Co., Brown Drilling Co., R. B. Byrd, Chiquita Oil Co., Colby Oil & Gas, Adolph Dovre, Ralph E. Fair, Easton & Manning, Eckert & Son, Iannind & Coffield, Hantho-Nelson, Inc., Artz & Horner, Mee, Ames & Mee, Oliver & Pearson, C. F. Richards, B. F. Robinson, Taylor Refining Co., Texas Gulf Petroleum Co., W. M. Vaughey, W. T. D. Production Co., R. S. Wyrick. **Remarks:** Brown Drilling Co.'s G. N. Blackwell 1, John Roe Survey, about 1½ mi sw Branyon field, completed Feb. 18, 1937; drilled to 2347 ft, 1 ft in Edwards lime and tested sulphur water. Plugged back to 2190 ft and completed 15 bbls day on pump after acidizing. Top chalk 1918 ft, 6⅝-in casing 2911 ft. Referred to by some as Burdette Wells field, rather it is an extension to Branyon.

BUCHANAN

C. W. Cannon, W. Spillers surveys, 5 mi e Lockhart. **Discovery Well:** Al Buchanan et al's L. K. Brown 1, July 10, 1929, flowed 77 bbls 38.2 gravity oil day from 2053 ft, top serpentine 1740 ft, elev 469 ft, 6⅝-in casing set 1730 ft, 4¾ liner 340 ft to total depth. **Means of Discovery:** Geological information, trend play. Indications of faulting at surface. **Type Structure:** Production mainly on upthrow side of ne-sw faulting. Several wells on other side in serpentine. **Producing Formation, Depth and Gravity:** Midway-Navarro, 950 ft, gas; serpentine, 1700 ft; Austin chalk, 2200 ft, 39.5 gravity; Edwards lime, 2450 ft. **Producing Area:** 160 acres. **Extent of Development:** To Jan. 1, 1937, 13 wells, 8 oil, 1 gas, 4 failures. During 6 months, 1937: 9 wells, 8 oil, 1 gas. **Deepest Test:** Gulf Production Co.'s W. E. Witter heirs 1, abnd 2762 ft. **Estimated Ultimate Recovery:** 650,000 bbls. **Production Through 1936:** 167,533 bbls. **Indicated Remaining Reserve:** 482,467 bbls. **Daily Production July 1, 1937:** 340 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 7. **Principal Leaseholders:** Texas Gulf Petroleum Co., Ed Will Oil Co., Easton & Manning, Goode & Mayton, McAlester Fuel Co., L. G. Priest, Stewart, Carter & Ramos.

* Prospect. †Salt dome, no production. ‡Gas field.

DALE

Nick Kelly, Squire Damon, W. C. Swearingen, J. Gilbert, George James surveys, se Dale. **Discovery Well:** The Texas Co.'s Beatty 1, Aug. 29, 1927, pumping 50 bbls 37.5 gravity oil, 2324 ft. **Means of Discovery:** Geological information. **Type Structure:** Some faulting with production backed up against upthrow side. **Producing Formation, Depth and Gravity:** Locally known as Dale lime, conglomerate of Taylor chalk and serpentine, 2300 ft, 37.5 gravity. **Producing Area:** 250 acres. **Extent of Development:** To Jan. 1, 1937, 75 wells, 49 oil, 26 gas. During 6 months, 1937: 1 oil well. **Deepest Test:** Magnolia Petroleum Co.'s Taylor 1, 2765 ft Edwards lime, abnd Oct. 10, 1927. **Estimated Ultimate Recovery:** 1,800,000 bbls. **Production Through 1936:** 1,142,756 bbls. **Indicated Remaining Reserve:** 657,244 bbls. **Daily Production July 1, 1937:** 150 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Adams & Lyles, W. B. Hinton, Noack & Lanning, Sun Oil Co., The Texas Co., Ogden & Reed, W. B. Moore, Marts & Beavans, Burwyn Oil Co. **Remarks:** Includes north extension area.

DUNLAP

Solomon Seal Survey, 3 mi w Luling. **Discovery Well:** M. O. Rayor et al's Dunlap 1-A, July 15, 1931, pumping 30 bbls 38 gravity oil, total depth 2525 ft, producing horizon 2299-2304 ft, top Edwards lime 2511 ft, top chalk 2092 ft, 6⅝-in 2127 ft, plugged back and completed in chalk. **Means of Discovery:** Geological information. **Type Structure:** Crevices and broken formation from basal Taylor to near top of Edwards lime. Mainly on upthrow side of fault. **Producing Formation, Depth and Gravity:** Taylor marl and Austin chalk 2150-2450 ft, 38 gravity. **Producing Area:** 90 acres. **Extent of Development:** To Jan. 1, 1937, 23 wells, 8 oil, 15 failures. During 6 months, 1937: 3 wells, 1 oil, 2 failures. **Deepest Test:** R. Y. Walker's (was Bob Rose) J. M. Pierce 1-B, td 2539 ft, top Edwards lime 2532 ft, pb and comp as oil well May 10, 1935. **Estimated Ultimate Recovery:** 400,000 bbls. **Production Through 1936:** 266,911 bbls. **Indicated Remaining Reserve:** 351,755 bbls. **Daily Production July 1, 1937:** 44 bbls. **Oil Outlet:** Texas Pipe Line Co. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** Empire Gas & Fuel Co., R. Y. Walker, Pat Armstrong, Detroit-Texas Development Co., R. B. Bryant, Ralph E. Fair, Adolph Dovre. **Remarks:** Broken area along fault system, includes "Sullivan" area across river into Guadalupe County.

LARREMORE

C. Crenshaw, W. Farrin surveys, 8 mi sw Lockhart. **Discovery Well:** Roxana Petroleum Corp.'s Jolly 1, June 27, 1928, 35 bbls 23.5 gravity oil and 180 bbls sulphur water, 1351 ft, producing horizon top Edwards lime 1309 ft, elev 570 ft. **Means of Discovery:** Geological information. **Type Structure:** Producing from upthrow side of ne-sw fault with upthrow side to se. **Producing Formation, Depth and Gravity:** Edwards lime, 1300 ft, 23.5 gravity; Austin chalk, 1000 ft, 26 gravity. **Producing Area:** 95 acres. **Extent of Development:** To Jan. 1, 1937, 19 wells, 14 oil, 5 failures. During 6 months 1937: 5 oil wells. **Deepest Test:** Shell Petroleum Corp.'s B. O. Shafer 1, abnd 1857 ft in Glenrose, May 13, 1929. **Estimated Ultimate Recovery:** 325,000 bbls. **Production Through 1936:** 230,012 bbls. **Indicated Remaining Reserve:** 94,988 bbls. **Daily Production July 1, 1937:** 60 bbls. **Oil Outlet:** All oil shipped by trucks. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Louis Crouch, C & C Fuel Oil Co. **Remarks:** Oil is being sold for fuel oil. Shallowest Edwards lime field in Luling district.

LYTTON SPRINGS

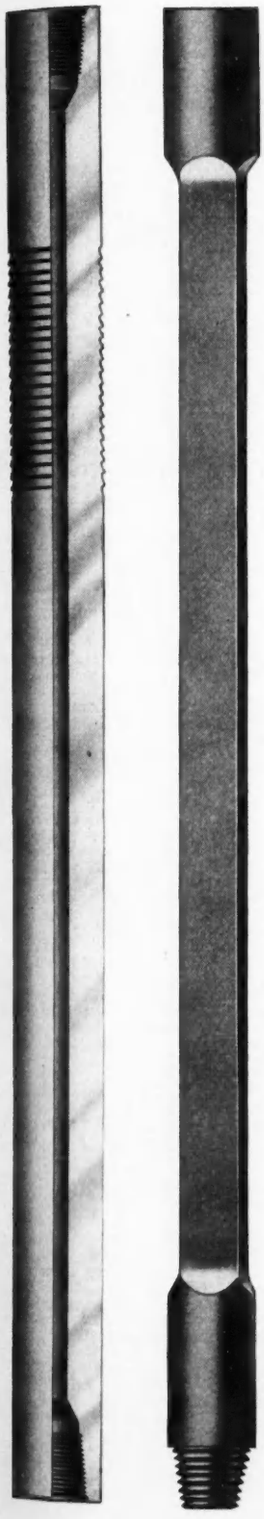
Gideon Pace, Pablo Martinez, F. Costello, Burleson surveys, e Lytton Springs. **Discovery Well:** Storey & LeFevre's Mrs. M. L. Brewer 1, Mar. 13, 1925, pumping 75 bbls 37.5 gravity oil per day, 1252 ft, serpentine 1220-52 ft. **Means of Discovery:** Geological information. **Type Structure:** Oval shaped plug dipping in all directions. Igneous rock ranges to 600 ft in thickness. **Producing Formation, Depth and Gravity:** Serpentine, 1250 to 1650 ft, 37.5 gravity. **Producing Area:** 1380 acres. **Extent of Development:** To Jan. 1, 1937: 323 wells, 291 oil, 32 failures. During 6 months, 1937: None. **Deepest Test:** Edwards lime, abnd 2292 ft. **Estimated Ultimate Recovery:** 8,280,000 bbls. **Production Through 1936:** 8,056,805 bbls. **Indicated Remaining Reserve:** 223,105 bbls. **Daily Production July 1, 1937:** 355 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Witherspoon Oil Co., Magnolia Petroleum Co., Humble Oil & Refining Co., Gulf Production Co., The Texas Co., Sun Oil Co., Mid-Kansas Petroleum Corp., Johnson Bros., Cosmo Oil Co. **Remarks:** Includes 2 producers completed in townsite, sometimes referred as Lytton Springs Townsite pool.

LULING

James Berry, Nancy Reavill, John Henry, Harriet Cattle and intermediate surveys, 5 mi w Luling. **Discovery Well:** United North & South Oil Co.'s Rios 1, Aug. 8, 1922, flowing 150 bbls 28 gravity oil per day, 2235 ft, producing horizon 2205-35 ft. Also 1500 bbls sulphur water per day. **Means of Discovery:** Geological information. **Type Structure:** Producing on the upthrow side of large fault, field 8 mi long and ranges from 300 to 3400 ft in width. **Producing Formation, Depth and Gravity:** Austin chalk, 1900 ft, 34 gravity; Edwards lime, 28 gravity. **Producing Area:** 2220 acres. **Extent of Development:** To Jan. 1, 1937, 685 wells, 594 oil, 3 gas, 88 failures. During 6 months, 1937: 11 oil wells. **Deepest Test:** United North & South Development Co.'s Kelly 1, abnd 7859 ft in schist topped at 4700 ft, Aug. 3, 1928. **Estimated Ultimate Recovery:** 75,000,000 bbls. **Production Through 1936:** 65,227,694 bbls. **Indicated Remaining Reserve:** 9,772,306 bbls. **Daily Production July 1, 1937:** 5825 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 6. **Principal Leaseholders:** L. S. Blount, Louis Crouch, Grayburg Oil Co., Max Loenig, Magnolia Petroleum Co., Prairie Lee Production Co., Rio Bravo Oil, Stronberg & Wolf, The Texas Co. **Remarks:** First Edwards lime field along Balcones Fault zone. Crevice area

BAASH-ROSS

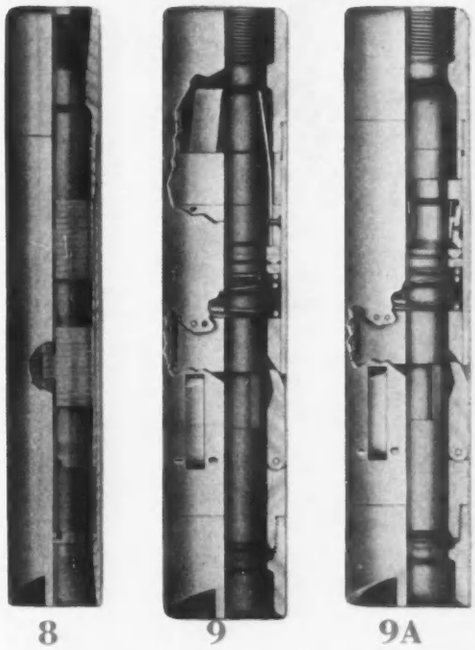
SAFE, MODERN OIL TOOLS!



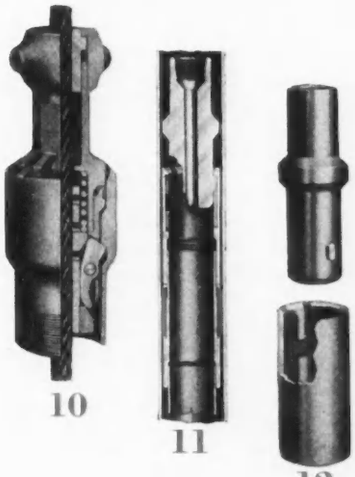
8 The Packing Casing Bowl effects a permanent connection between new casing and the casing remaining in the well after a defective section has been removed.

9-9A The External Drill Pipe Cutter is run on washover pipe. The cut is quickly made by rotating the fishing string, and the cut-off pipe is retained in the washover pipe by the overshot springs while being withdrawn from the hole. Interchangeable slip assembly (shown in 9A) adapts this cutter for cutting external flush joint drill pipe.

10 This non-sparking oil saver closes the well and allows all of the fluid to be expelled through the flow lines while the well is being swabbed or bailed. Automatically opens, closes and seals.



8 9 9A



10 11 12

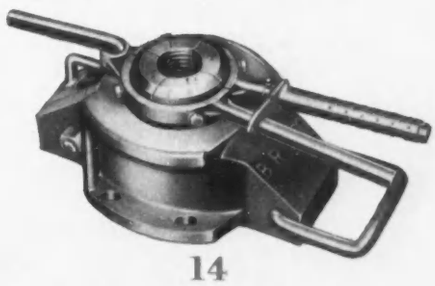
11 Packing type Adapter is attached to the top of the liner and permanently seals between the liner and casing. Easy to set and release.

12 The Baash-Ross Liner Setter and Adapter insure safety in running and removing liners of any length. (See Numbers 11 and 13 also.)

13 This packing-type Liner Hanger effects a permanent seal between the casing and the liner and supports the longest liner with safety. Releases easily when liner is to be pulled; can be used over and over again.

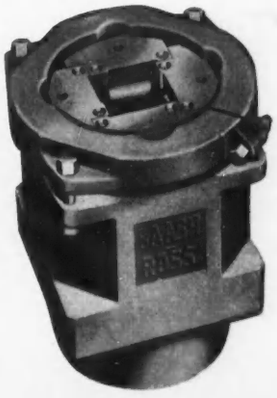
13

14 Open End Tubing Spider is installed without disconnecting flow lines. Slips are attached to self-locking tong and operated as a unit.



14

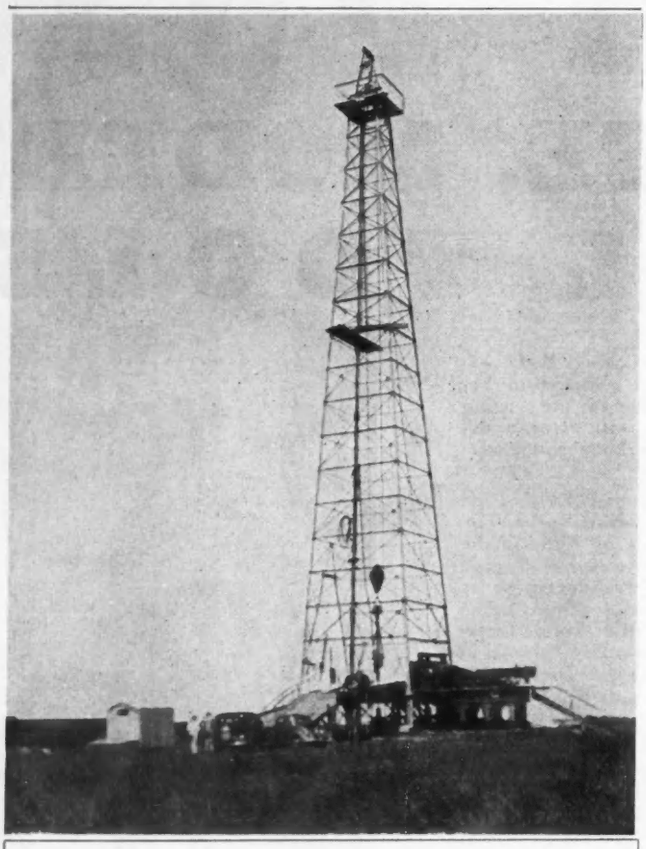
16 Trubore Forged Upset Kellys are forged to true size from alloy steel, and scientifically heat treated to produce the best physical properties. Made in all standard and special lengths, sizes and circulation hole diameters.



17

15 The circulation hole through Baash-Ross Trubore Drill Collars, drilled on highly specialized machines, is centered accurately for its entire length, and is without offsets to cause turbulence and sand cutting. Forged from alloy steels and scientifically heat treated to produce the best physical properties. Trubore Drill Collars are stocked in standard sizes; any special design made to your specifications.

17 The full length rollers of the Roller Kelly Bushing insure even, controlled feed of Kelly through rotary without binding when coring, drilling and fishing. Maximum driving surface with minimum friction.



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EQUIPPED WITH

HEAVY STEAM
ELECTRIC
GASOLINE
and
DIESEL DRILLING RIGS

2114 ALAMO NATIONAL BUILDING
SAN ANTONIO, TEXAS

opened by F. L. Thomson's M. F. Lawler 1, May 12, 1933, and located just east of Luling field, included in this field, as are several other crevices in immediate area.

LULING TOWNSITE

Solomon Seal Survey, 1 mi nw Luling. **Discovery Well:** G. A. McDonald's F. Tinkle 1, Solomon Seal Survey, 2691 ft; top Austin chalk 2490 ft. Feb. 15, 1937, 5 bbls per hour after acidizing, well soon dropped to 10 bbls day on pump. **Means of Discovery:** Geological information. **Type Structure:** Broken chalk against fault. **Producing Formation, Depth and Gravity:** Austin chalk, 2500 ft, 36.5 gravity. **Producing Area:** 20 acres. **Extent of Development:** To Jan. 1, 1937, 1 failure. First 6 months, 1937: 2 oil wells. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 50,000 bbls. **Production Through 1936:** None. **Indicated Remaining Reserve:** 50,000 bbls. **Daily Production July 1, 1937:** 65 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** J. R. Brinkley, Jr., G. A. McDonald, Stapper Pet. Co., Van Winkle et al.

SALT FLATS

A. Floyd, Gerren Hinds, James Hinds, John Rains surveys, 1 mi ne Luling. **Discovery Well:** Lutex Oil Co.'s (Sullivan-Bruner et al) Davis 1, May 28, 1928, flowing 268 bbls oil per day from Austin chalk at 2684 ft, later deepened to Edwards lime. **Means of Discovery:** Geological information. **Type Structure:** Long narrow producing area on upthrow side of fault. Field 7 mi long and 2100 ft wide. **Producing Formation, Depth and Gravity:** Austin chalk, 2250-2500 ft, 38.5 gravity; Edwards limestone, 2700 ft, 36.5 gravity. **Producing Area:** 1050 acres. **Extent of Development:** To Jan. 1, 1937, 376 wells, 340 oil, 2 gas, 34 failures. During 6 months, 1937: 4 wells, 3 oil, 1 failure. **Deepest Test:** No well drilled deeper than 100 ft into Edwards lime. **Estimated Ultimate Recovery:** 40,000,000 bbls. **Production Through 1936:** 35,260,798 bbls. **Indicated Remaining Reserve:** 4,739,202 bbls. **Daily Production July 1, 1937:** 4820 bbls. **Oil Outlets:** Shell Pipe Line Co., Gulf Pipe Line Co., Humble Pipe Line Co. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** Sun Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., The Texas Co., Shell Petroleum Corp.

CALHOUN COUNTY

HEYSER

In Calhoun and Victoria counties, Jose Maria Rios, D. D. Palmer, Agaton Sisneros and J. E. Galban surveys, 2 mi n Heyser. **Discovery Well:** Humble Oil & Refining Co. and Plymouth Oil Co.'s P. H. Welder 2, May 28, 1936, flowing 144 bbls 32.8 gravity oil per day, 7/64-in choke, 500 lbs tubing pressure, 715 lbs casing pressure, total depth 5474 ft, producing horizon 5467½-72½ ft, gas/oil ratio 250/1. **Means of Discovery:** Geophysical survey, geological information. **Type Structure:** Nosing along general strike line with sand lensing. **Producing Formation, Depth and Gravity:** Heterostegina, 4875 ft, 26 gravity; Frio, 5450 ft, 32.8 gravity; 5750 ft, 36.4 gravity. **Producing Area:** 1400 acres. **Extent of Development:** To Jan. 1, 1937, 25 wells, 19 oil, 6 failures. During 6 months, 1937: 31 wells, 30 oil, 1 failure. **Deepest Test:** Humble Oil & Refining Co. and Plymouth Oil Co.'s P. H. Welder 1, 6506 ft, Discorbis 4401-4581 ft, Heterostegina 4731-4943 ft, abnd 6506 ft. **Estimated Ultimate Recovery:** 32,000,000 bbls. **Production Through 1936:** 124,505 bbls. **Indicated Remaining Reserve:** 31,875,495 bbls. **Daily Production July 1, 1937:** 3980 bbls. **Oil Outlet:** Humble Pipe Line. **Rigs Running July 1, 1937:** 5. **Principal Leaseholders:** Humble Oil & Refining Co., Portilla Drilling Co., Commonwealth Oil & Gas Co., Plymouth Oil Co., Buchanan & Blanco, Magnolia, Sinclair Prairie Oil & Gas Co., Normandie Oil & Gas Co. **Subsequent Discovery, since July 1, 1936:** Humble & Plymouth's P. H. Welder A-3, completed Sept. 10, 1936, flowing 1.76 bbls 26 gravity oil per hour, 9/64 choke, little salt water, 900 lbs tubing pressure, 1650 lbs casing pressure, 4876 ft, producing horizon 4868½-76 ft. 7-in casing 4866 ft, later deepened to 5490 ft. Commonwealth Oil & Gas Co.'s W. H. Bennett 4, completed June 9, 1937, flowing 8 bbls 36.4 gravity oil per hour through 9/64 choke, tubing pressure 650 lbs, casing pressure 790 lbs. Depth 5747 ft, perforated casing 5742-46 ft, gas sand 5717-36 ft, oil sand 5737-47 ft.

PORT LAVACA

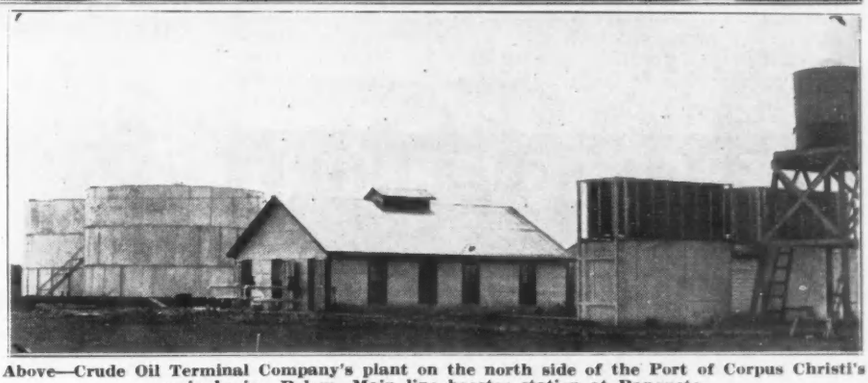
A. Esparza and M. Sanchez Surveys, 2 mi n Port Lavaca. **Discovery Well:** Steen Drilling Co.'s F. Stanzel 1, Nov., 1934, flowing 40 bbls 60 gravity oil and 5,000,000 cu ft gas per day, total depth 6158 ft. **Means of Discovery:** Reflection seismograph and torsion balance. **Type Structure:** Small fault with some folding. **Producing Formation, Depth and Gravity:** Marginulina, 6150 ft, 60 gravity, distillate; 6250 ft, 41.2 gravity. **Producing Area:** 220 acres. **Extent of Development:** To Jan. 1, 1937, 21 wells, 11 oil, 2 gas, 8 failures. During 6 months, 1937: None. **Deepest Test:** The Texas Co.'s J. A. Martin 1, total depth 6512 ft, abnd in Frio, June, 1935. **Estimated Ultimate Recovery:** 1,900,000 bbls. **Production Through 1936:** 362,866 bbls. **Indicated Remaining Reserve:** 1,537,134 bbls. **Daily Production July 1, 1937:** 250 bbls. **Oil Outlet:** Wood-Moore Refining corp. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Crown Central Petroleum, The Texas Co., Halliburton Oil Producing Co., Empire Gas & Fuel Co., Steinberger Petroleum Corp.

SEADRIFT*

Including J. J. Ogsberry and C. P. Garcia surveys, 5 mi e Seadrift. **Means of Discovery:** Geophysical survey. **Extent of Discoveries:** Three failures have been drilled and a fourth well is now active. The deepest test was Continental Oil Co.'s Moody (American

* Prospect. †Salt dome, no production. ‡Gas field.

Helping to Market South Texas Oil

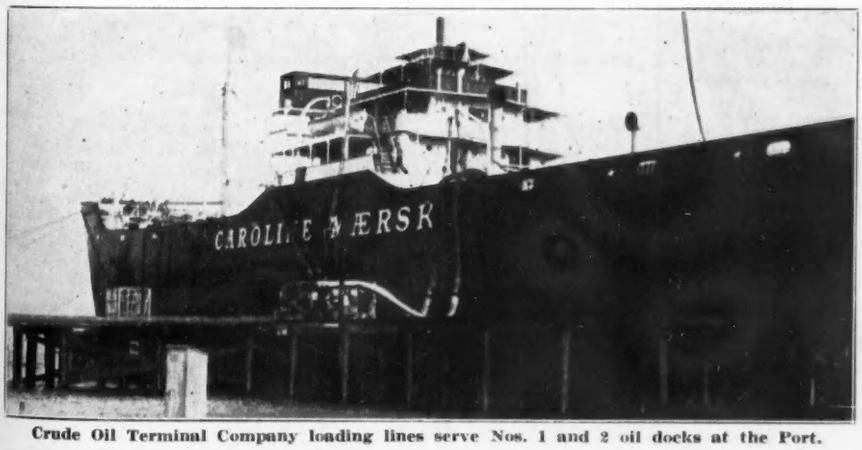


Above—Crude Oil Terminal Company's plant on the north side of the Port of Corpus Christi's main basin. Below—Main line booster station at Banquete.

The Crude Oil Terminal's plant, with a capacity of 448,000 barrels, is located on the north bank of the Port of Corpus Christi's main turning basin, and has direct pipe line connections to Nos. 1 and 2 oil docks. Five loading lines, ranging in size from five and one-half inches to 14 inches, enables the plant to load 6000 barrels of oil per hour.

The Crude Oil Terminal Company is giving substantial aid in marketing South Texas crudes, now being taken from the earth at the rate of 232,000 barrels per day.

In addition to providing storage facilities to producers, and assisting in marketing operations, affiliated companies transport oil to ship side here. The Crude Oil Pipe Line Company operates a five and one-half inch line to Freer. The Saxet Heights Pipe Line Co. gathers oil in the Saxet Heights fields, close to Corpus Christi, as well as in the O'Hern field, delivering to the Crude Oil Pipe Line Co. at Freer. The Driscoll Pipe Line Co. gathers oil in the Driscoll field, delivering it to the COPL at Banquete, where a main line booster station is operated.

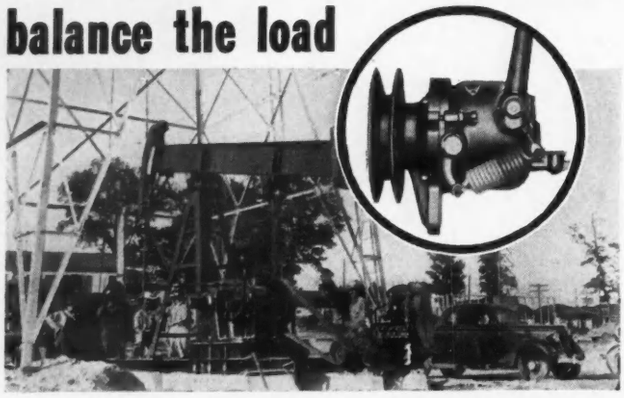


Crude Oil Terminal Company loading lines serve Nos. 1 and 2 oil docks at the Port.

The affiliated pipe line companies are able to transport 12,000 barrels of oil per day, business having increased 150 percent within the last year. And business is still increasing.

Corpus Christi's position as an oil port is secure. It is a rapidly growing city, having increased its population about 100 per cent since 1930. Although oil is playing a tremendous part in its development, it has many other advantages to sustain its growth.

PIERCE GOVERNORS
balance the load



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PIERCE GOVERNORS
STANDARD SINCE 1913

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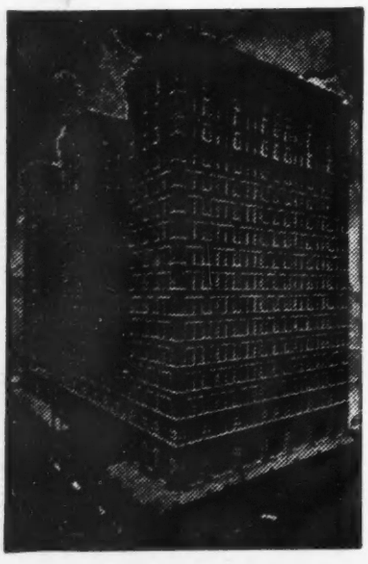

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THE RICE HOTEL
1,000 Rooms $2.50 and up
"Houston's Welcome To The World"
R. Bruce Carter, Manager

National Realty Company) 2-A (3) which was junked and abnd at 9083 ft in heaving shale April 10, 1936. The other two wells did not progress to this depth. Fourth well is Austin (Vandenberg) 1, 1 mi n of the first three tests. It set a string of 11¾-in casing at 8521 ft and was abnd at 8825 ft. Hiawatha Oil & Gas Co.'s John Roemer 1, J. J. Ogsberry Survey, 10 mi sw Port Lavaca, set a string of 8⅝-in casing at 5900 ft, drilled to 8378 ft and was abnd in 1936, after encountering a gas sand 8206-15 ft. Well was deepened to 8470 ft, drill stem stuck at 8300 ft and well was abnd in 1937 after recovering 5500 ft of drill stem. Discorbis was topped at 6004, Heterostegina at 6400 ft and Marginulina at 6705 ft.

DIMMITT COUNTY

CARRIZO SPRINGS*

Centering around the area between L. I. & M. Company Survey 26 and R. C. Morgandale Survey 6, 5 mi nw Carrizo Springs. **Means of Discovery:** Surface indications, trend drilling on Chittim anticline. **Extent of Discoveries:** Three wells drilled. Humble Oil & Refining Co.'s City National Bank 1-A, abnd in 1927 at 5004 ft. Had sand with shale streaks 2956-84 ft, sandy shale 2985-2999 ft and shale to 3003 ft. Set 8-in casing at 2942 ft and bailed a few gallons of 35 gravity oil. Deepened and abnd. Several other shows in the Navarro. Topped Taylor marl 3709 ft and Austin chalk at 4167 ft. Diamond Half Oil Co. drilled A. Eardley Estate 1 to 4256 ft and Eardley Estate 2 to 825 ft in 1935. Paul C. Teas and Maryland Oil Corp.'s S. E. McKnight 1, Sec. 23, block 13, I&GN sur, 3 mi se Diamond Half abnd well.

DUVAL COUNTY

CHARAMOUSCA

Section 151, 1 mi sw S. R. C. field. **Discovery Well:** Sun Oil Co. and Simms Oil Co.'s Worden & Drought 2, Sept. 20, 1935, flowing 46½ bbls, ½-in choke, 75 lbs tubing, 160 lbs casing pressure, 1581 ft, producing horizon 1570-81 ft. **Means of Discovery:** Trend drilling. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth and Gravity:** McElroy zone of Jackson age; 1500-1600 ft, 21 gravity. **Producing Area:** 80 acres. **Extent of Development:** To Jan. 1, 1937, 6 wells, 1 oil, 5 failures. During 6 months, 1937: 12 wells, 9 oil, 3 failures. **Deepest Test:** Magnolia Petroleum Co.'s Duval-Worden 1, abnd 3892 ft Jan. 6, 1936. **Estimated Ultimate Recovery:** Included in S.R.C. **Production Through 1936:** Included in S.R.C. **Indicated Remaining Reserve:** Included in S.R.C. **Daily Production July 1, 1937:** Included in S.R.C. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** N. V. Duncan, Magnolia Petroleum Co., Transwestern Oil Co., Sun Oil Co. and SR&C Oil Corp. **Remarks:** N. V. Duncan's Worden & Drought 3 found sand 1531-37, elev 402 ft, about 40 ft removed in the section from the discovery sand (which provided only one oil well) and completed test Feb. 14, 1937, for 90 bbls of oil with large volume of gas. Present development in that sand.

COLMENA

Sections 192, 191, 49, 583, 51, 487, 585, 6 mi sw Freer. **Discovery Well:** Mills Bennett Oil Corp.'s Duval County Ranch Co. 1, Dec. 15, 1934, initial production 15,000,000 cu ft gas, 525 lbs rock pressure, total depth 3006 ft, producing horizon 1486-1505 ft, plugged to 1280 ft and re-drilled to 1505 ft, casing 1471 ft. **Means of Discovery:** Geology. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Whitsett section of Jackson age, 1500 ft, 20 gravity. **Producing Area:** 650 acres, 160 acres oil. **Extent of Development:** To Jan. 1, 1937, 14 wells, 5 oil, 2 gas, 7 failures. During 6 months, 1937: 23 wells, 13 oil, 5 gas, 5 failures. **Deepest Test:** Mills Bennett Oil Corp.'s Duval County Ranch Co. 2, 3396 ft, abnd May 22, 1935. **Estimated Ultimate Recovery:** 1,000,000 bbls. **Production Through 1936:** 13,345 bbls. **Indicated Remaining Reserve:** 986,655 bbls. **Daily Production July 1, 1937:** 375 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Conservative Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., The Texas Co., Rutherford & Hooper, Wellington Oil Co.

Conservative Oil Company's Duval County Ranch Co. 2, completed Aug. 13, 1936, pumping 100 bbls 20 gravity oil per day, depth 1554 ft, set casing on bottom and perforated 1516-19 ft. Extended field 2 mi se and opened oil production just above regular gas sand.

DRISCOLL

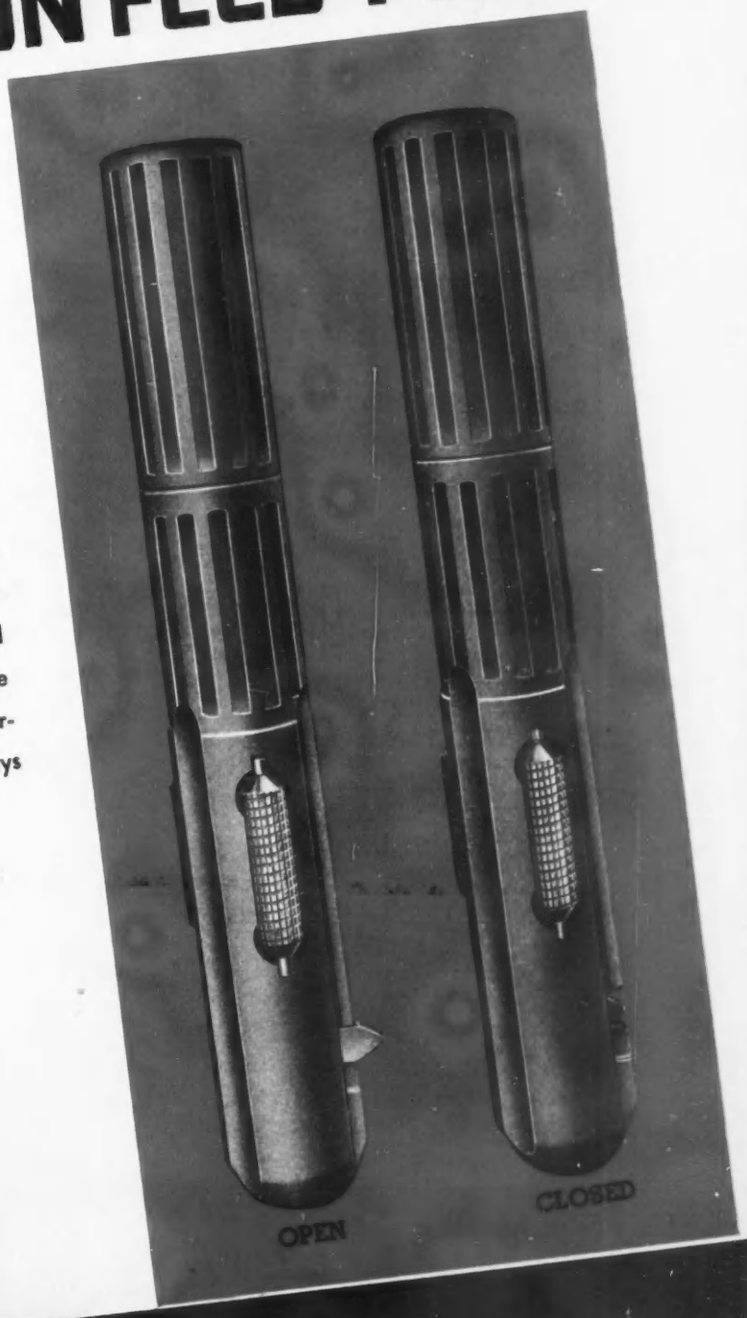
Sections 448 and 23, of Santa Rosalia Grant, 6 mi n Realitos. **Discovery Well:** Robert Driscoll's Fee 3, completed 1924, 3,000,000 ft gas, total depth 528 ft, sand 523-28 ft, elev 346 ft. **Means of Discovery:** Gas in water wells, geological and geophysical information. **Type Structure:** Local high with sand lensing to se. Formations thicken materially to se from western Duval County shore line, accounting for wide interval between established sand zones. **Producing Formation, Depth and Gravity:** Oakville-Catahoula, 500 ft, gas; Upper Jackson (similar to Cole) 22.5 gravity; Hockleyensis (locally called Driscoll) 2900 ft, 22.5 gravity; Government Wells, 3250-3400 ft, 33 gravity. **Producing Area:** 650 acres, 350 acres oil. **Extent of Development:** To Jan. 1, 1937, 28 wells, 13 oil, 9 gas, 6 failures. During 6 months, 1937: 4 oil wells completed. **Deepest Test:** Continental Oil Co.'s R. Driscoll Estate 2-A, 4695 ft, plugged back to sand 3449-59 ft, completed 200 bbls fluid per day, 30 percent oil, Aug. 24, 1934. **Estimated Ultimate Recovery:** 3,000,000 bbls. **Production Through**

* Prospect. †Salt dome, no production. ‡Gas field.

Dependable Inside Cuts
With this

ABERCROMBIE
RED BALL
CUTTING SERVICE

FRICTION FEED TOOL



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Reversible Action

TONG

3 sizes for pipe ¾ to 12 inches.

VULCAN BOLL-WEEVIL

ZEPHYR

Equipped with Alloy "Superchain"

Again Williams steps ahead with a light-weight pattern of the popular "Boll-Weevil" Reversible Action Tong. Stronger and lighter, capacity for capacity, the "Zephyr" is ideal for flat pipe work and pipe line work—exceptionally efficient in trenches. Operates by simply laying Tongs on top of pipe and hooking chain around it. To "make up", engage rear end of jaws and push handle down; to "break out", pull tongs back to engage forward teeth and pull up on handle—see illustration below. Reversible action is instantaneous.

All "Zephyr" Tongs are heat-treated and equipped with Williams' new Alloy "Superchain". Handle and Panel in Jaws finished in gray enamel; jaws have bright faced edges and blue backs; Alloy "Superchains" are cadmium-plated.

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Headquarters for: Drop-Forged Wrenches (Carbon and Alloy), Detachable Socket Wrenches, "C" Clamps, Lathe Dogs, Tool Holders, Eye Bolts, Hoist Hooks, Thumb Nuts and Screws, Chain Pipe Tongs and Vises, etc., etc.

REGULAR "VULCAN BOLL-WEEVIL"

Same reversible action as "Zephyr", but heavier, capacity for capacity. Equipped with Regular Chain. Four sizes for pipe 3/4 to 12 inches.

WILLIAMS
SUPERIOR DROP-FORGED TOOLS

1936: 551,042 bbls. **Indicated Remaining Reserve:** 2,448,958 bbls. **Daily Production July 1, 1937:** 1135 bbls. **Oil Outlet:** Humble Pipe Line Co., some shipped by Continental Oil Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholder:** Continental Oil Co. **Remarks:** This field is controlled by Continental Oil Co., which is carrying on an exploratory campaign. One deep well, possibly to 8000 ft or deeper, is planned to definitely determine lower possibilities. Government Wells zone in this pool has been divided into three groups, first having 3 lenses, second, 2 lenses, and the third 3 lenses.

EAGLE HILL

Sections 267, 269, 270 and 206, Eagle Hill. **Discovery Well:** Al. Buchanan's Duval Ranch Co. 1, Oct. 15, 1933, 500 bbls, 22 gravity oil, producing horizon 1457-77 ft, elev 552 ft. **Means of Discovery:** Trend drilling and geological information, based on surface indications and subsurface correlations. **Type Structure:** Sand lensing, with probable fault on west side of field. **Producing Formation, Depth and Gravity:** Upper Jackson, first sand locally known as Cole, 1475 ft, 22 gravity; Government Wells horizon, 2150 ft, 23 gravity. **Producing Area:** 800 acres, 340 acres oil. **Extent of Development:** To Jan. 1, 1937, 39 wells, 21 oil, 2 gas, 16 failures. During 6 months, 1937: None. **Deepest Test:** O. W. Killam's J. F. Welder Heirs 1, Section 102, 2524 ft, abnd. **Estimated Ultimate Recovery:** 1,250,000 bbls. **Production Through 1936:** 502,110 bbls. **Indicated Remaining Reserve:** 747,990 bbls. **Daily Production July 1, 1937:** 330 bbls. **Oil Outlet:** Magnolia Pipe Line Co. and Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Al Buchanan Producing Co., Foster Brothers, The Texas Co., Transwestern Oil Co., Marzo Oil Co., W. C. McBride, Inc., Eagle Hill Corp. **Remarks:** About 2 miles north of this field Buchanan & Tyrell's E. R. Hagist 1, completed Aug. 13, 1932, initial production 6,000,000 cu ft gas, spraying little 22 gravity oil per day, depth 2144, sand 2110-22 ft, shale 2122-34 ft, sand 2134-44 ft, later drilled deeper to 2505 ft and abnd. This field also includes area on northeast side of production referred to frequently as the Hagist pool.

EL MESQUITE

El Mesquite Trinidad Vela Grant, Share 4, 4 mi from sw c of county. **Discovery Well:** Rogers & Rogers' Rita S. de Pena 1, July 16, 1935, heading 15 bbls 43 gravity oil per day, 2862 ft, producing horizon 2850-62 ft, elev 670 ft derrick floor, 7-in casing set 2845 ft. **Means of Discovery:** Geological data based on shows in three failures in immediate vicinity. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Cockfield, 2860 ft, 43 gravity. **Producing Area:** Total 10 acres. **Extent of Development:** To Jan. 1, 1937, 5 wells, 1 oil, 4 failures. During 6 months, 1937: None. **Deepest Test:** Rogers & Rogers' J. Valdez 1, abnd at 3502 ft, Sept. 27, 1936. **Estimated Ultimate Recovery:** 15,000 bbls. **Production Through 1936:** 976 bbls. **Indicated Remaining Reserve:** 14,024 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Rogers & Rogers.

GOVERNMENT WELLS

Including Sections 363, 362, 360, 359, 361, 250, East 60, West 60, 2, 41, 43, 44, 45, 46, 42, 101, 208, 209, 74, 48, 61, 62, 59, 78, 249, 135, 136, 134. **Discovery Well:** Onyx Oil Co.'s N. G. Norton 1 completed Aug. 22, 1928, 150 bbls 22.5 gravity oil; 6⅝-in choke; 2347 ft, producing horizon 2339-47 ft; elev 609 ft. **Means of Discovery:** Geology. **Type Structure:** Sand lensing along apparent shore line, faulting at south end of field. **Producing Formation, Depth and Gravity:** Cole sand, Jackson age, 1550 ft, gas; Gov.'t Wells, 2200-2350 ft, 23 gravity; Loma Novia, 2400 ft, 26 gravity. **Producing Area:** 8350 acres, 7500 acres oil. **Extent of Development:** To Jan. 1, 1937: 872 wells, 759 oil, 43 gas, 70 failures. During 6 months, 1937; 20 wells, 12 oil, 1 gas, 7 failures. **Deepest Test:** Magnolia Petroleum Co.'s L. Lundell 1; total depth 5858 ft; abnd. **Estimated Ultimate Recovery:** 80,000,000 bbls. **Production Through 1936:** 28,364,519 bbls. **Indicated Remaining Reserve:** 61,635,481 bbls. **Daily Production July 1, 1937:** 14,570 bbls. **Oil Outlet:** Crude Oil Pipe Line Co., Texas Pipe Line Co., Magnolia Pipe Line Co., Humble Pipe Line Co., Crude Oil Pipe Line Co., and several individual buyers. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Al Buchanan Producing Co., R. B. Byrd Oil Corp., Central Producers Inc., Coffield & Lanning, W. T. Daniel, Hamill & Hamill, Highland Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Navarro Oil Co., G. B. Parr, Parr Oil Co., C. G. Porter, Reynosa Oil Co., Pan American Producing Co., San Diego Oil Co., Soto Oil Corp., Southwest Producing Co., Sun Oil Co., The Texas Co., Viola Oil Co., Trenchard, Whisenant & French, Windsor Oil Co., Bridwell Oil Co., Blankenship, Gilcrease Oil Co., Cox & Hammon, Duval Oil Corp., Government Wells Oil Co., Ralph R. Ogden, Reed & McKay, A. J. Mickel, Pan American Producing Co., Salt Dome Oil Co., Simpson-Fell Oil Co., Smith & Storey, Trapshooter Reilly, Wayne Oil Corp. **Remarks:** Magnolia Petroleum Co.'s H. Wendt 1, completed Aug. 19, 1936; flowed 400 bbls 26 gravity oil per day ½-in choke; 600 lbs casing pressure, 200 lbs tubing pressure; 2392 ft; sand 2381-92 ft; 7-in casing 2391 ft; Loma Novia sand.

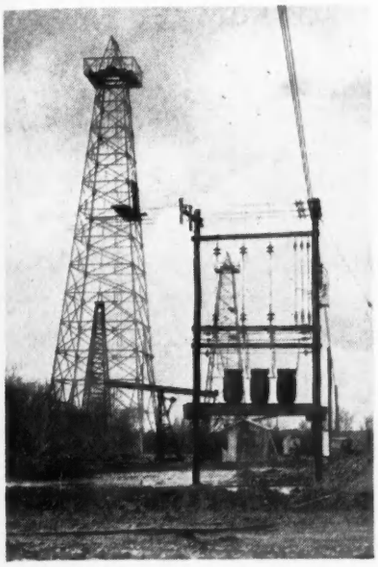
GRAY RANCH*

Centering around section 7, 5 mi se Seven Sisters. **Means of Discovery:** Geological information. **Extent of Development:** Southern Crude Oil Purchasing Co.'s La Gloria 1; (Gray Ranch) drilled in the northeast corner of section 7, completed as gasser at 639 ft; 4 other tests drilled in the immediate vicinity failed to develop production.

HOFFMAN

Sections 122, 119, 120, 125, 118, 117, and 114, 7 mi s Freer. **Discovery Well:** Conway & Campbell's W. K. Hoffman 1, completed Sept. 10, 1933, 50,000,000 cu ft dry gas; total depth 2757 ft; producing horizon 2749-57 ft; elev 725 ft. **Means of**

* Prospect. †Salt dome, no production. ‡Gas field.



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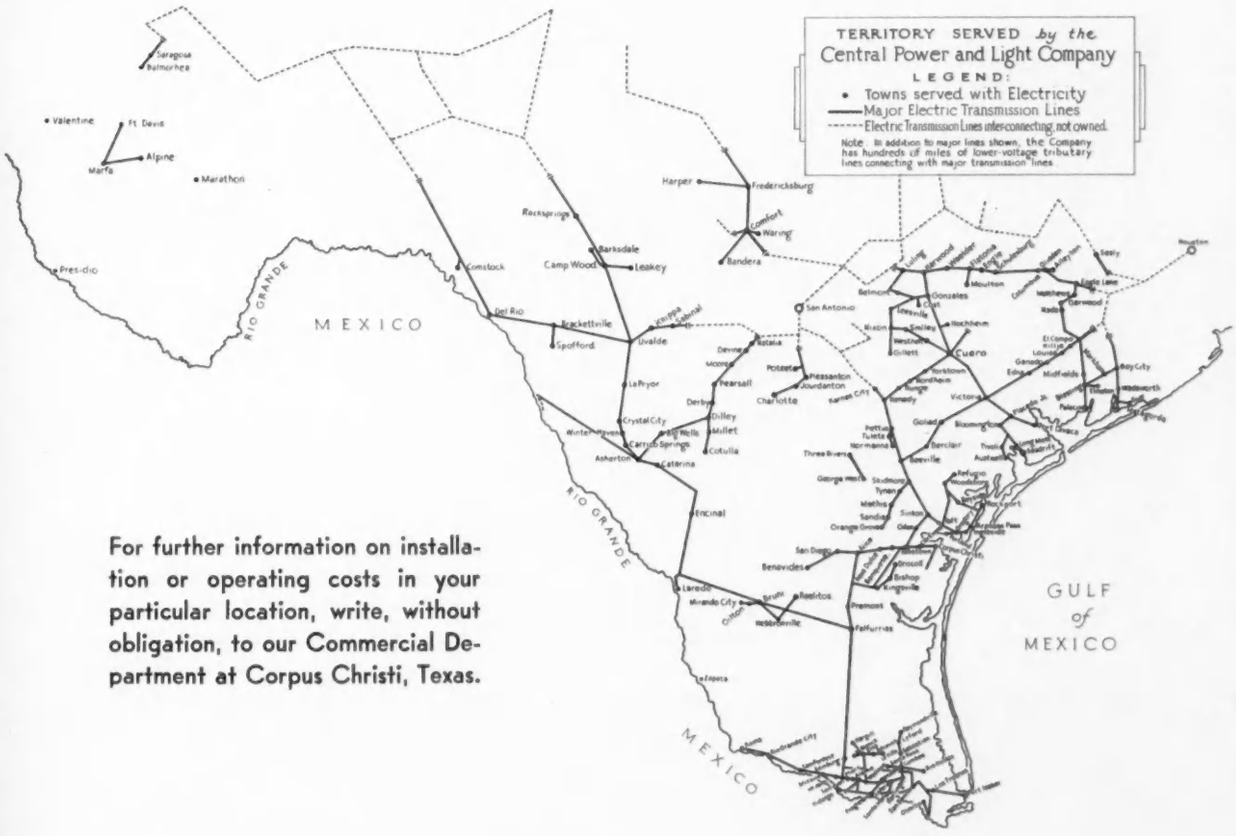
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Discovery: Geological information, deeper sand, mainly trend drilling. **Type Structure:** Sand lensing, dipping se. **Producing Formation, Depth and Gravity:** Government Wells, Jackson age, 2750 ft; 23 gravity; Loma Novia, 2875 ft, 26 gravity. **Producing Area:** 1200 acres, 650 acres oil. **Extent of Development:** To Jan. 1. 1937: 86 wells, 44 oil, 9 gas, 33 failures. During 6 months, 1937; 37 wells, 30 oil, 7 failures. **Deepest Test:** Rogers & Rogers' Sophie Hoffman 2; total depth 3605 ft; plugged back to 2816 ft and perforated casing 2738-50 ft; completed April 7, 1926, for 10,000,000 cu ft gas per day; 475 lbs pressure. **Estimated Ultimate Recovery:** 5,000,000 bbls. **Production Through 1936:** 266,480 bbls. **Indicated Remaining Reserve:** 4,733,520 bbls. **Daily Production July 1, 1937:** 1500 bbls. **Oil Outlet:** Crude Oil Pipe Line Co. and Humble Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Bridwell Oil Co., Duval Oil Corp. Plymouth Oil Co., Rogers & Rogers, Reliance Oil & Royalty Co., Standard of Kansas, Humble Oil & Refining Co., Ralph E. Fair, Conway and Campbell, Cox & Hamon.

IGNACIO

Section 211, 6 mi ne Freer. **Discovery Well:** DeSoto Oil Co., Coronado Oil Co.'s Welder & Wood 1, completed June 20, 1933, 24,000,000 cu ft gas per day; total depth 2500 ft, plugged back 2158 ft; top sand 2115 ft. Casing was leaky and well again plugged back to 2118 ft and completed; elev 540 ft. **Means of Discovery:** Trend play, geological data. **Type Structure:** Small sand lens. **Producing Formation, Depth and Gravity:** Upper Government Wells sand, Jackson age, 2100 ft, 22 gravity. **Producing Area:** Total 10 acres. **Extent of Development:** To Jan. 1, 1937; 16 wells, 1 oil, 1 gas, 14 failures. During first 6 months, 1937; none. **Deepest Test:** The Texas Co.'s P. de la Rodriguez; 3101 ft; abnd Jan. 30, 1934. **Estimated Ultimate Recovery:** Included in Government Wells. **Production Through 1936:** Included in Government Wells. **Indicated Remaining Reserve:** Included in Government Wells. **Daily Production July 1, 1937:** Included in Government Wells. **Oil Outlet:** Well abnd. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** DeSoto Oil Co., The Texas Co.

KOHLER

Sections 162, 399, 163, 165, 164, 166, 395, 396, 423, 424, 17, 172, 169, 144, 453, 454, 62 and 5, 8 mi n Bruni. **Discovery Well:** Simms Oil Co.'s J. T. Dinn 1, completed June 14, 1926, 30,000,000 cu ft gas, 1760 ft; top sand 1748 ft; elev 780 ft. **Means of Discovery:** Geology, trend drilling. **Type Structure:** Sand lensing situation similar to other fields along Mirando trend. **Producing Formation, Depth and Gravity:** Jackson series, Cole, 1800 ft, 21.5 gravity; Government Wells 2450 ft, 22.6 gravity; Mirando sand, 2800 ft, 21.6 gravity. **Producing Area:** 5250 acres, 280 oil. **Extent of Development:** To Jan. 1, 1937: 113 wells, 21 oil, 53 gas, 39 failures. During 6 months, 1937; 11 wells, 3 oil, 3 gas, 5 failures. **Deepest Test:** Humble Oil & Refining Co.'s V. Kohler 50, Section 164, 7723 ft; abnd Aug. 31, 1931; elev 820 ft; well had sands 1859-87 ft showing oil, salt water and gas; other sands just below 6000 ft; set 9⅝-in casing 6021 ft. **Estimated Ultimate Recovery:** 700,000 bbls. **Production Through 1936:** 499,051 bbls. **Indicated Remaining Reserve:** 200,949 bbls. **Daily Production July 1, 1937:** 200 bbls. **Oil Outlet:** United Gas System, Humble Pipe Line Co. **Rigs Running July 1, 1937:** Nine. **Principal Leaseholders:** Humble Oil & Refining Co., Navarro Oil Co., Reiter-Foster, Simms Oil Co., Chiquita Oil Co., Sun Oil Co. and others. **Subsequent Discoveries Since July 1, 1936:** Humble Oil & Refining Co. V. Kohler 52-A completed Nov. 19, 1936, sand 2613-42 ft; flowed 13.65 bbls 21.6 gravity oil per hour through ½-in choke, tubing pressure 105 lbs, casing pressure 320 lbs. Opened new sand. Mirando sand discovery in North Kohler field. **Remarks:** This report covers area to north commonly referred to as North Kohler field.

LABBE

Sections 2, 221, 416, 1 and 516, 1½ mi from Seven Sisters. **Discovery Well:** Magnolia Petroleum Co.'s Emil Labbe 1, completed Nov. 25, 1934, 20,000,000 cu ft gas, 890 lbs rock pressure; total depth 2460 ft; producing horizon 2453-60 ft; 7-in casing 2453 ft. **Means of Discovery:** Geology and geophysics. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Hockleyensis of Jackson age, 2400 ft, gas; Loma Novia, 2900 ft, 27 gravity. **Producing Area:** 580 acres, 80 oil. **Extent of Development:** To Jan. 1, 1937: 13 wells; 1 oil, 5 gas, 7 failures. During 6 months, 1937: 5 wells, 2 oil, 2 gas, 1 failure. **Deepest Test:** Stanolind Oil and Gas Co.'s Ira G. Yates 4; 4054 ft; plugged back and set casing 2473 ft; perforated in sand 2446-51 ft; completed 1,140,000 cu ft gas; ¼-in choke; 700 lbs pressure; completed June 5, 1936. **Estimated Ultimate Recovery:** 800,000 bbls. **Production Through 1936:** Nine. **Indicated Remaining Reserve:** 800,000 bbls. **Daily Production July 1, 1937:** 225 bbls. **Outlet:** United Gas System, Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** Stanolind Oil and Gas Co., Magnolia Petroleum Co., Mill Bennett, Humble Oil & Refining Co. **Remarks:** Subsequent discoveries since July 1, 1936: Magnolia Petroleum Co.'s A. L. Labbe; elev 721 ft; total depth 3249 ft; plugged back 2908 ft; perforated 2905-07 ft; completed 2-24-37 for 35 bbls 27 gravity oil per day on pump. (Discovered oil production in Loma Novia sand.)

LOMA NOVIA

Sections 73, 72, 41, 554, 101, 64, 62, 553, 63, 67, 70, 68, 114, 62, 78, 77, 84, 83, 72, 76, 60, 59, 75, 71 and 73, ½ mi e Freer. **Discovery Well:** Humble Oil & Refining Co.'s D. Ruiz Estate 1, completed Dec. 27, 1934, 50 bbls 25 gravity oil and 150 bbls salt water; producing horizon 2785-90 ft. **Means of Discovery:** Flank drilling on known structure. **Type Structure:** Local sand lenses on e flank of Government Wells structure. **Producing Formation, Depth and Gravity:** Loma Novia sand in Jackson formation about 50 to 150 ft below regular Government Wells sand; 2750 ft, 26 gravity; Mirando, 2850 ft, 22 gravity. **Producing Area:** 8200 acres, 7350 oil. **Extent of Development:** To Jan. 1, 1937, 707 wells; 662 oil, 12 gas, 33 failures. During 6 months, 1937:

* Prospect. †Salt dome, no production. ‡Gas field.

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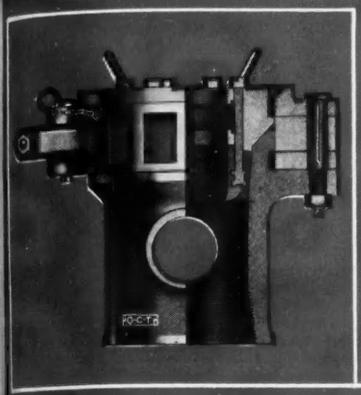

The sectional drawing of the O-C-T type "D" 5000-lb. test pressure Blowout Preventer shown at left illustrates the basic principle of design of all O-C-T Blowout Preventers. Its patented design provides a positive seal around any size drill pipe, casing, or tubing . . . either standard or flush joint . . . yet it permits the pipe to be rotated or raised and lowered to prevent sticking.

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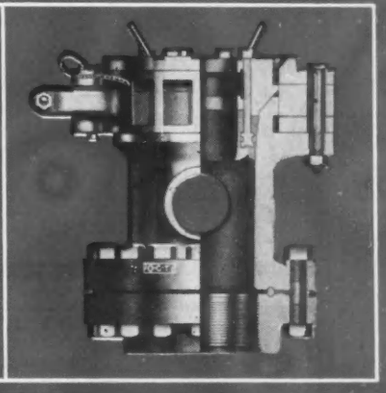

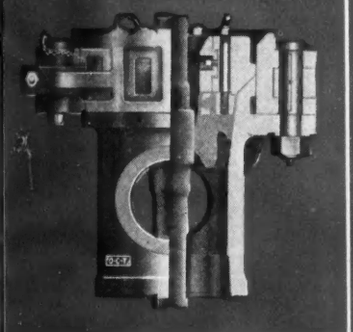

The illustration at left shows the type "D" Blowout Preventer equipped with a stripper rubber designed by O-C-T engineers to fit all types O-C-T Blowout Preventers. It permits tool joints and pipe collars to pass through in perfect safety although there is pressure on the well. As well pressure increases, the rubber tightens its grip around the pipe. Any O-C-T Preventer can be converted into a stripper type Preventer by simply replacing the regular pack-off with the new stripper rubber.

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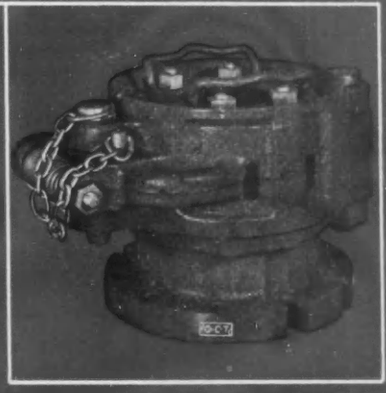

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82 wells, 69 oil, 3 gas, 10 failures. **Deepest Test:** Magnolia Pet. Co.'s F. W. Herbst 1, abnd 3263 ft Jan. 7, 1935. **Estimated Ultimate Recovery:** 70,000,000 bbls. **Production Through 1936:** 5,403,053 bbls. **Indicated Remaining Reserve:** 64,596,947 bbls. **Daily Production July 1, 1937:** 16,650 bbls. **Oil Outlet:** Crude Oil Pipe Line Co., Magnolia Pipe Line Co., Humble Pipe Line Co., Texas Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Buchanan Production Co., Bridwell Oil Co., Rodney DeLange, Duval Oil Corp., Eastern Texas Petroleum Co., Frank J. Gravis, Gravis Oil Co., Gilcrease Oil Co., Hamill & Smith, Highland Oil Co., Humble Oil & Refining Co., Kaffie Lumber Co., Leach & Wilson, Magnolia Petroleum Co., Maybelle Oil Co., Montour Producing Co., Ralph Ogden, Parr Oil Corp., Pitkin Golston Oil Co., Reynosa Oil Co., Rosan Oil Co., Rosan Texla Oil Co., Russ Petroleum Co. et al, Shell Petroleum Corp., Southwest Producing Co., Sun Oil Co., The Texas Co., Valley Osage Oil Co. **Remarks:** Several sand lenses at varying depth are found in this field. Some wells are productive in more than one lens. **Subsequent Discoveries since July 1, 1936:** Humble Oil & Refining Co.'s G. Ruiz 16, completed Sept. 15, 1936, total depth 2861 ft, sand and sandy shale 2846-61 ft, flowed 13 bbls 22 gravity oil per hour; tubing pressure 30 lbs, casing pressure 200 lbs. Opened Mirando sand.

LOMA VISTA

Section 103, 5½ mi ne Freer. **Discovery Well:** Wellington Oil Co.'s (was Santa Clara) J. F. Welder 1-A, completed Feb. 9, 1936, 127 bbls 25 gravity oil; producing horizon 2914-21½ ft; 7-in casing 2911 ft. **Means of Discovery:** Drilled on trend with 2 dry holes which showed saturation. **Type Structure:** Sand lensing. **Producing Formation, Depth & Gravity:** Loma Novia sand, Jackson age, 2900 ft, 26 gr. **Producing Area:** 10 acres. **Extent of Development to Jan. 1, 1937:** 8 wells, 1 oil, 1 gas, 6 failures. During 6 months, 1937: 1 failure. **Deepest Test:** Shell Pet. Corp.'s J. F. Weldon 1-B, abnd 3242 ft, Aug., 1936. **Estimated Ultimate Recovery:** 45,000 bbls. **Production Through 1936:** 5,425 bbls. **Indicated Remaining Reserve:** 39,575 bbls. **Daily Production July 1, 1937:** 12 bbls. **Oil Outlet:** Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Pan-American Prod. Corp., Shell Pet. Corp., George Coates, Darby Pet. Co., Atlantic Ref. Co., Wellington Oil Co.

LUNDELL‡

Section 140, about 6 mi sw Freer. **Discovery Well:** Government Wells Oil Co.'s H. A. Lundell 1, completed June 15, 1937, flowed 11,000,000 cu ft of gas and sprayed several bbls of oil per day through ¾-in choke, 640 lbs working pressure, sand 1515-20 ft, 7-in casing 1513 ft. **Means of Discovery:** Geology. **Type Structure:** Sand lensing, some faulting suggested. **Producing Formation, Depth & Gravity:** Cole sand of upper Jackson, 1550 ft, 21 gr. **Producing Area:** 20 acres in gas, none in oil. **Extent of Development to Jan 1, 1937:** 1 failure. During 6 months, 1937: 1 gas well. **Deepest Test:** Discovery. **Daily Production July 1, 1937:** Gas. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Government Wells Oil Co., The Texas Co., Magnolia Pet Co. **Remarks:** Since July 1, 1937, oil production has been established on the flank of this sand lens.

MAGNOLIA-HAHL*

South central portion Section 51, 3 mi nw of Freer. **Means of Discovery:** Geology. **Extent of Development:** 2 wells. Magnolia Pet Co.'s C. W. Hahl 1, completed at 4094 ft in sand as gasser spraying little oil. Hahl 2, was abandoned at 5362 ft. Several other wells have been drilled in general vicinity, but nothing developed.

NORTH SWEDEN

Includes Sections 8, 9, 10, 11, 18 and 19 Sweden Subdivision Santo Flores Grant & nw portion San Andres Grant, 1 mi south Benavides. **Discovery Well:** Gravis & Doran's F. Vaello Puig 1, completed April 18, 1937, flowing 220 bbls of 43 gr oil per day through 5/32-in choke, tubing pressure 750 lbs, casing pressure 850 lbs, sand 4730-55 ft. **Means of Discovery:** Geology. **Type Structure:** Nosing and sand lens, likely some faulting. **Producing Formation, Depth & Gravity:** Hockleyensis of Jackson age (corresponds to upper Government Wells sand) 4730 ft, 43 gr; Lower Government wells (50 ft deeper) 4380 ft, 43.6 gr. **Producing Area:** 10 acres. **Extent of Development:** To Jan. 1, 1937: No wells completed. During 6 months, 1937: 13 oil wells. **Deepest Test:** Navarro Oil Co.'s E. M. Rossi 1, on July 1, 1937, was drilling below 5210 ft. Well later drilled to 6179 ft in Yegua and plugged back for tests above. **Estimated Ultimate Recovery:** 8,500,000 bbls. **Production Through 1936:** New Field, none. **Daily Production July 1, 1937:** 675 bbls. **Oil Outlets:** Republic Oil Corp., Gravis Pipe Line Co. to loading racks at Benavides, also Humble Pipe Line Co. to main line connection at Benavides, thence to tidewater. **Rigs Running July 1, 1937:** 14. **Principal Leaseholders:** Frank Gravis Oil Co., Gravis & Doran, Hiawatha Oil & Gas Co., Benedum & Trees Oil Co., Bridwell Oil Co., Russ Pet. Corp., Sun Oil Co., Woodley Pet. Co., Standard Oil Co. of Kansas, Navarro Oil Co., Republic Production Corp., Nordan & Morris, Arkansas Fuel Oil Co., Humble Oil & Ref. Co., Mid-Continent Pet Corp., Argo Oil Corp., Glen C. McCarthy, Circle Oil Co. **Subsequent Discoveries Since July 1, 1936:** Standard Oil Company of Kansas' Atlee Parr 1, completed July 1, 1937, flowing 265 bbls 43 gr oil per day, 3/16 in choke, tubing pressure 450 lbs, casing pressure 710 lbs. Sand 4728 ft, sandy shale with sand streaks 4743-47 ft. (This sand about 50 feet above regular pay.)

* Prospect. †Salt dome, no production. ‡Gas field.

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PALANGANA

Sections 4, 247, 245, 81, 82, 241, 255, 2 and 3, 2 mi n Noleda. **Discovery Well:** National Oil Co.'s R. Schaliert 1, completed June 30, 1928, pumping 30 bbls 16 gr oil; producing horizon 450-52 ft, elev 497 ft. **Means of Discovery:** Geology. **Type Structure:** Piercement type salt dome, 3000 ft uplift. **Producing Formation, Depth & Gravity:** Catahoula (Marine Miocene). **Producing Area:** 40 acres. **Extent of Development:** To Jan 1, 1937: 83 wells, 5 oil, 76 failures. During 6 months, 1937: no wells completed. **Deepest Test:** Frank Gravis, Gravis et al's 2, abandoned 5454 ft, October 23, 1936. **Estimated Ultimate Recovery:** 75,000 bbls. **Production Through 1936:** 9,846 bbls. **Indicated Remaining Reserve:** 65,154 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Loading rack on railroad. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Humble Oil & Ref. Co., Southern Alkali Corp., Frank Gravis, J. U. Edwards, Texas Gulf Sulphur Co., Penn-Palengana Oil Co. **Remarks:** Was actively explored by the Union Sulphur Co., is used by The Southern Alkali Co. of Corpus Christi which has an 8-in line from the field to Corpus Christi, transporting brine solution. **Subsequent Discoveries Since July 1, 1936:** Frank J. Gravis et al's Jane Schaliert 1-A, completed September 25, 1936, 2744 ft, sand 2730-44 ft, flowed 25 bbls 42.7 gravity oil per hour through ⅜-in choke, tubing pressure 60 lbs, casing pressure 200 lbs, opened new sand.

PENA‡

Sections 79 and 80, 10 mi s Freer. **Discovery Well:** Stanley Smith (Smith & Hunter's) Pena 1, completed Jan. 31, 1933, 30,000,000 cu ft gas, 700 lbs tubing pressure; producing horizon 1915-32 ft. **Means of Discovery:** Geology. **Type Structure:** Small sand lensing structure back up against fault. **Producing Formation, Depth & Gravity:** Frio, 1930 ft, gas. **Producing Area:** 10 acres. **Extent of Development:** To Jan 1, 1937: 3 wells completed; no oil wells; 1 gas well; 2 failures. During 6 months 1937: None. **Deepest Test:** Stanley Smith's Manuel Oliverez 1; 3620 ft; abandoned May 10, 1933. **Outlet:** Well Shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Smith & Hunter, Parr Oil Co.

PETERS

Sections 176, 178, 184, 188, 38, 65, 34, 177, 12 mi sw from Freer. **Discovery Well:** Shasta Oil Co. & Highland Oil Co.'s W. R. Peters 1, completed Jan. 15, 1933; initial production 20,000,000 cu ft gas per day; 750 lbs rock pressure; total depth 2451 ft; producing horizon 2431-51 ft; elevation 797 ft. **Means of Discovery:** Geology, trend play. **Type Structure:** Sand lensing closing on west and dipping to east. **Producing Formation, Depth & Gravity:** All Jackson sand, Cole 1800 ft, gas, Government Wells, 2450 ft, gas; Mirando sand 2750 ft, 23 gr oil. **Producing Area:** 1500 acres; 120 in oil. **Extent of Development:** To Jan. 1, 1937: 20 wells, 7 oil, 6 gas, 7 failures. First 6 months, 1937: 3 wells, 1 oil, 1 gas, 1 failure. **Deepest Test:** Tom Graham's J. D. Sutherland 1, 3309 ft, P.B. to 2342-47½ as gasser Sept. 3, 1936. **Estimated Ultimate Recovery:** 840,000 bbls. **Production Through 1936:** 24,395 bbls. **Indicated Remaining Reserve:** 815,605 bbls. **Daily Production July 1, 1937:** 170 bbls. **Oil Outlets:** United Gas System, Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Mills Bennett Producing Co., Windsor Oil Co., The Texas Co., Highland Oil, Sun Oil Co., Tidewater Oil Co., Shasta Oil Co., Mid-Continent Pet. Corp., Tom Graham.

PIEDRA LUMBRE

Section 100 and 95, 1½ mi nw Government Wells field. **Discovery Well:** Magnolia Pet Co.'s Duval County Ranch 1, completed Sept. 5, 1935, 312 bbls 22.5 gr oil, ⅜-in choke, 400 lbs tubing, 600 lbs casing pressure; producing horizon 2133-39 ft, elev 430 ft. **Means of Discovery:** Based on Surface fault trace in the immediate vicinity. **Type Structure:** Sand lensing. **Producing Formation, Depth & Gravity:** All Jackson's; Cole sand, 1350 ft, gas; Gov't Wells sand, 1975 ft, 20.5 gr.; Loma Novia sand 2140 ft, 22.5 gr. **Producing Area:** 600 acres, 450 in oil. **Extent of Development:** To Jan. 1, 1937: 38 wells; 30 oil, 3 gas, 5 failures. During 6 months, 1937: 12 wells, 10 oil, 1 gas, 1 failure. **Deepest Test:** Magnolia Pet. Co.'s Duval County Ranch Co. 3, (survey 97), drilled to 3250, plugged back to 1625, perforated 1321-32 ft, completed as gasser. **Estimated Ultimate Recovery:** 4,050,000 bbls. **Production Through 1936:** 197,418 bbls. **Indicated Remaining Reserve:** 3,852,582 bbls. **Daily Production July 1, 1937:** 860 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Humble Oil & Ref. Co., Magnolia Pet. Co., The Texas Co., Sun Oil Co.

PIEDRAS PINTAS

Sections 185, 8, 531, 245, and 12, east central part of county, 2 mi ne Benavides. **Discovery Well:** National Oil Co.'s Tinney 1, completed Sept. 10, 1905, 12 bbls 13 gr oil; producing horizon 460-80 ft; elev 375 ft. **Means of Discovery:** Oil seeps. **Type Structure:** Salt dome, piercement type. **Producing Formation:** Shallow zones from 180-580 ft in Catahoula. Lower zone Hockleyensis sand. **Producing Area:** 120 acres. **Extent of Development:** To Jan. 1, 1937: 61 wells, 25 oil, 36 failures. During 6 months, 1937: none. **Deepest Test:** Humble O&R Co.'s Walsh et al 7, Sec 185, depth 4502 ft, abnd, sands 3821-25 & 4485-4502 ft showed oil and salt water. **Estimated Ultimate Recovery:** 150,000 bbls. **Production Through 1936:** 143,178 bbls. **Indicated Remaining Reserve:** 6,822 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlet:** None. Most of oil shipped out through loading racks on Tex-Mex Railway. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Tom Graham and Texon Royalty Co., Cabildo Oil Properties, Humble Oil & Ref. Co. **Remarks:** Except for few shallow pumpers, field is dormant at present.

* Prospect. †Salt dome, no production. ‡Gas field.

RANCHO SOLO

Section 157, 18 mi sw from Freer. **Discovery Well:** California Co.'s Gruy 1, completed Nov. 27, 1935, 25,000,000 cu ft gas, 800 lbs pressure; 3777 ft, producing horizon 2555-69 ft, plugged 2575 ft, perforated 2555-69 ft, set 5½-in 2625 ft. **Means of Discovery:** Geology. **Type Structure:** Sand lensing. **Producing Formation, Depth & Gravity:** Cole, 1800 ft, 21 gr; Government Wells, 2560 ft, gas. **Producing Area:** 240 acres, 60 in oil. **Extent of Development:** To Jan. 1, 1937: 6 wells, 2 oil, 2 gas, 2 failures. During 6 months, 1937: 3 oil wells. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 360,000 bbls. **Production Through 1936:** None. **Indicated Remaining Reserve:** 360,000 bbls. **Daily Production July 1, 1937:** 150 bbls. **Oil Outlet:** Humble Pipeline Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Bunn Brothers & Coates, Inc.; Standard Oil Co of Texas, Sun Oil Co.

REALITOS*

Centers around point about 2 mi se Realitos in Santos Garcia Survey. **Means of Discovery:** Geophysics and geology. **Extent of Development:** Several shallow wells drilled. Shell Pet. Corp. has evidence of probable salt dome in work done about 1930.

SARNOSA

Sections 574, 576, 130, 127, 5 mi sw Freer. **Discovery Well:** Capps & Smith's Duval County Ranch Co. 1, completed April 19, 1932, 50,000,000 cu ft gas, spraying small quantity of 22 gravity oil; 2412 ft, sand and shale series 2350 ft to total depth, elev 646 ft. **Means of Discovery:** Geology and trend play. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth & Gravity:** Hockleyensis zone of Jackson series, locally called Lower Government Wells horizon, 2400 ft, 22 gr. **Producing Area:** 660 acres, 590 in oil. **Extent of Development:** To Jan. 1, 1937: 65 wells, 44 oil, 5 gas, 16 failures. During 6 months, 1937: 6 wells, 3 oil, 3 failures. **Deepest Test:** Texas Company's D. Ruiz 2, Section 127, 2816 ft, abandoned August 1, 1932. **Estimated Ultimate Recovery:** 3,775,000 bbls. **Production Through 1936:** 1,530,548 bbls. **Indicated Remaining Reserve:** 2,344,452 bbls. **Daily Production July 1, 1937:** 830 bbls. **Oil Outlet:** Magnolia Pipe Line Co., Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Humble Oil & Ref. Co., Magnolia Pet. Co., Sarnosa Oil Corp., Seaport Oil Corp., Sun Oil Co., Wertheimer Oil Corp., The Texas Co.

SEVEN SISTERS

Sections 226, 308, 112, 118, 225, 224, 384, 386, 384, 383, 381, 102, 220, 113, and 591, 2 mi s of center of n line of county. **Discovery Well:** Harvey & Henderson's Chernoskey 1 completed May 13, 1935, pumping 73 bbls 20.5 gr; total depth 2650 ft, producing horizon 2220-25 ft, elev 534 ft. **Means of Discovery:** Surface and subsurface geology. **Type Structure:** Sand lensing, some nosing and faulting. **Producing Formation, Depth & Gravity:** Chernoskey (Hockleyensis of Jackson age, 2200 ft, 20.5 gr; Government Wells, 2500 ft, 23 gr; Loma Novia, 2600 ft, 27 gr; Mirando about 100 ft below Loma Novia, 2550 ft, 23 gravity (depth variance due to elevation). **Producing Area:** 4,000 acres, 3840 in oil. **Extent of Development:** To Jan. 1, 1937: 381 wells, 347 oil, 3 gas, 31 failures. During 6 months, 1937: 63 wells, 53 oil, 2 gas, 8 failures. **Deepest Test:** Shell Pet. Corp.'s J. F. Welder 2-B; 4404 ft; abandoned April 11, 1936. **Estimated Ultimate Recovery:** 44,000,000 bbls. **Production Through 1936:** 2,082,440 bbls. **Indicated Remaining Reserve:** 1,917,560 bbls. **Daily Production July 1, 1937:** 9,800 bbls. **Oil Outlets:** Magnolia Pipe Line Co., Humble Pipe Line Co., Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** A. J. Brinkoeter, Atlantic Ref. Co., W. W. Blocker, Robert Bowles Oil Co., Al Buchanan & Blanco Oil Co., Darby Pet. Corp., Diamond Half Oil Co., Dulce Oil Co., Humble Oil & Ref. Co., Illinois Pet. Co., Magnolia Pet Co., Leach & Cloyes, Mid-Continent Pet. Co., Navarro Oil Co., Pan American Prod. Co., G. B. Parr et al & Delaney Oil Co., Reliance Oil and Ref. Co., Wellington Oil Co. of Delaware, Shell Pet. Corp., The Texas Co. and Westheimer & Daube. **Discoveries Since July 1, 1936:** Humble Oil & Ref. Co.'s Dowdy-Fee 5, completed March 10, 1937; flowed 11.03 bbls oil per hour, 6 percent salt water; ⅝-in choke, tubing pressure 35 lbs, casing pressure 460 lbs, gas sand 2556-58, oil sand 2558-65, 5½-in casing at 2550 ft (Mirando sand). A. J. Brinkoeter's P. Garza de Rodriquez 3, completed May 28, 1937, pumping 170 bbls per day, sand 1559-66 ft (Frio sand).

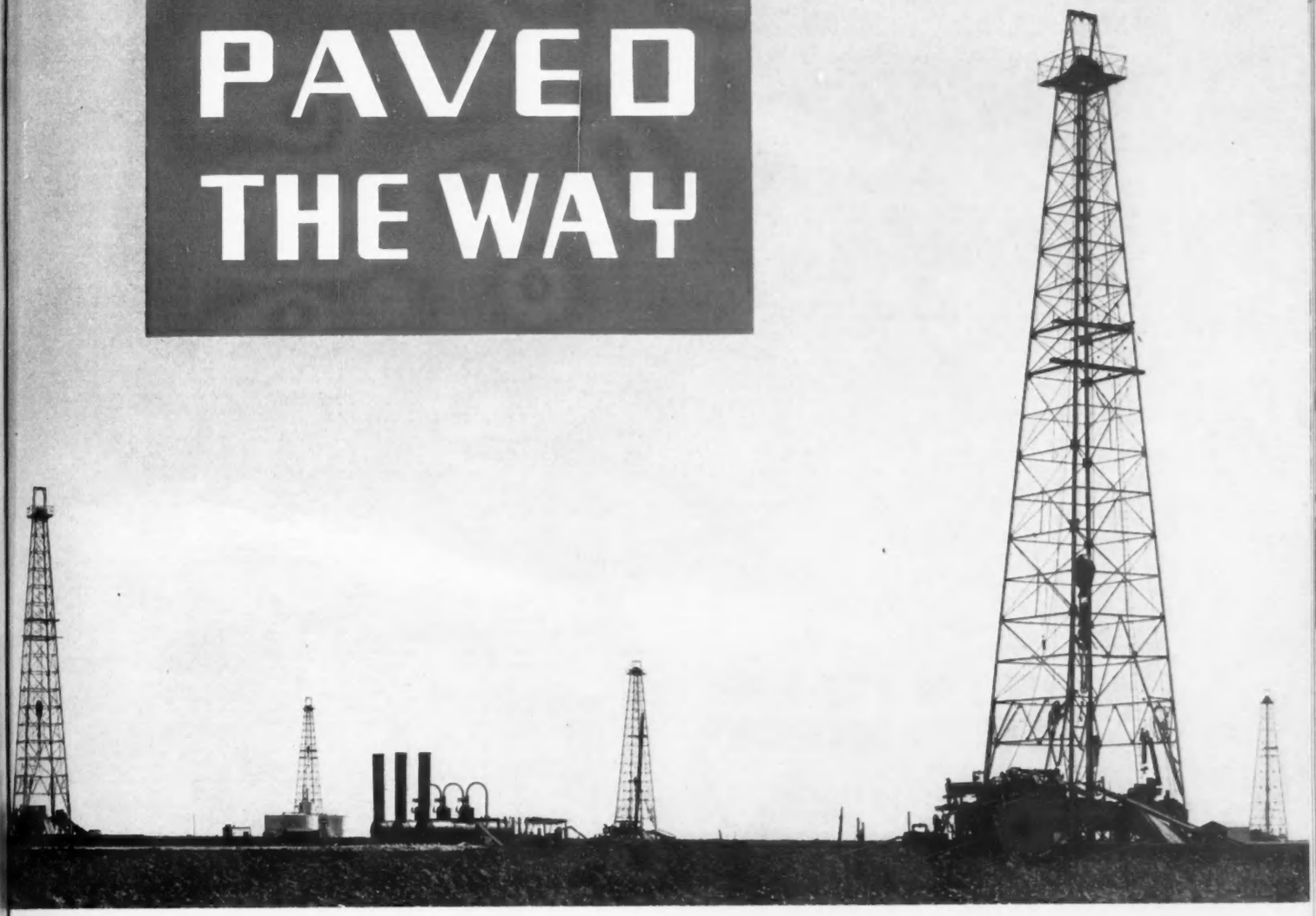
SOUTH HOFFMAN

Sec 498, 1½ mi s Hoffman field. **Discovery Well:** Argo Oil Co & John Clopton's Smith Corkill 2, completed March 2, 1937, pumping 30 bbls 27.1 gr oil and 100 bbls salt water per day, sand 2670-88 ft, completed through perforations 2672-75 ft, total depth 2780 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lensing. **Producing Formation, Depth & Gravity:** Hockleyensis, about 100 ft above Government Wells horizon, 2675 ft, 27.1 gr. **Producing Area:** 10 acres. **Extent of Development:** To 1937, no wells drilled. First 6 months, 1937: 5 wells, 1 oil well, 4 failures. **Deepest Test:** Argo Oil Co. & John Clopton's Smith-Corkill 1, abnd Jan. 11, 1937, at 3514 ft. **Estimated Ultimate Recovery:** Included in Hoffman. **Production Through 1936:** Included in Hoffman. **Indicated Remaining Reserve:** Included in Hoffman. **Daily Production July 1, 1937:** Included in Hoffman. **Oil Outlet:** Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Argo Oil Co. & John Clopton.

S R C

Section 293, 9 mi nw Freer. **Discovery Well:** S. R. &. C. Oil Corp. et al's Duval County Ranch Co. 1, completed Sept. 23, 1930, flowing 300 bbls 20.8 gr oil; producing horizon 1731-40 ft. **Means of Discovery:** Geological information. **Type Structure:**

PETTY PAVED THE WAY



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Monoclinal fold. **Producing Formation:** McElroy of Jackson age. **Producing Area:** 80 acres. **Extent of Development:** To Jan. 1, 1937: 11 wells, 6 oil, 5 failures. During 6 months, 1937: None. **Deepest Test:** The Texas Co.'s Duval County Ranch Co. 1, abnd at 2331 ft. **Estimated Ultimate Recovery:** 650,000 bbls. **Production Through 1936:** 268,564 bbls. **Indicated Remaining Reserve:** 381-436 bbls. **Daily Production July 1, 1937:** 320 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** The Texas Co., Magnolia Pet. Co., S. R. & C. Oil Corp. **Remarks:** Reserve total includes Charamousca field with 80 acres, making total involve 160 producing acres in both fields. Also includes all production figures of Charamousca.

SWEDEN

Sections 14, 15 and 24 Ball Subdivision, Santos Flores Grant, about 4 mi e Sweden. **Discovery Well:** Hiawatha Oil & Gas Co.'s Southland Life Insurance Co. 1, completed Feb. 3, 1937, flowing 10 bbls of 58 gr oil per hour, ⅛-in choke, tubing pressure 710 lbs, casing pressure 1200 lbs, depth 5867 ft, perforations 5846-56 ft, elevation 385 ft, derrick floor. **Means of Discovery:** Geological and geophysical information. Data from several deep wells previously drilled indicated favorable structural condition. **Type Structure:** Several very pronounced faults disclosed from small amount of drilling, sands lenticular. **Producing Formation, Depth & Gravity:** Hockleyensis zone of Jackson age (upper and lower Government Wells zones) 5070-5120 ft, gas and 46 gr; Cockfield, 5850 ft, 58 gr. **Producing Area:** 80 acres, 60 in oil. **Extent of Development:** To Jan. 1, 1937: None. During 6 months, 1937: 5 wells, 3 oil, 1 gas, 1 failure. **Deepest Test:** Hiawatha Oil & Gas Co.'s Southland Life Insurance Co. 2, 5939 ft. **Estimated Ultimate Recovery:** 500,000 bbls. **Daily Production July 1, 1937:** 175 bbls. **Oil Outlet:** Republic Oil Corp. line to loading rack at Sweden. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Hiawatha Oil & Gas Co. **Subsequent Discoveries Since July 1, 1936:** Hiawatha Oil & Gas Company's Southland Life Ins. Co. 2, completed May 25, 1937, flowing 15,000,000 cu ft gas ¼-in choke, tubing pressure 300 lbs, casing pressure 750 lbs, drilled to 5939 ft, perforated casing 5100-5 ft, sand 5100-16 ft. Hiawatha Oil & Gas Co.'s George Herberger 2, completed June 29, 1937, pumped about 25 bbls 46 gr oil, considerable salt water through perforations 5075-84 ft, sand 5072-91 ft, depth 5914 ft.

THOMAS-LOCKHART

E. H. Valentine Survey 26, about 8 mi nw of San Diego. **Discovery Well:** E. R. Thomas Est. and Lockhart Brothers' Lillian Parr 1, completed April 18, 1937, flowing 125 bbls of 56 gr oil, large volume of gas per day, ½-in choke, tubing pressure 975 lbs, casing pressure 1300 lbs, sand 4659-72 ft. **Means of Discovery:** Geological information based on subsurface correlations of wells in immediate vicinity. Largato Inlier. **Type Structure:** Sand lensing, also some faulting. **Producing Formation, Depth & Gravity:** Pettus in Cockfield, 4670 ft, 56 gr. **Producing Area:** 20 acres. **Extent of Development:** To Jan. 1, 1937: 3 failures. During 6 months, 1937: 4 wells, 1 oil, 3 failures. **Deepest Test:** Intrepid Oil Co.'s Parr 2, abnd in 1935 at 5305 ft. **Estimated Ultimate Recovery:** 100,000 bbls. **Daily Production July 1, 1937:** 40 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** E. R. Thomas Est., Lockhart Brothers, Republic Production Co., Intrepid Oil Co., South Coast Oil Co., Taylor Ref. Co., Houston Oil Co., and others.

* Prospect. †Salt dome, no production. ‡Gas field.

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EDWARDS COUNTY

HOLLMAN*

Sutton County line near Val Verde County line. **Means of Discovery:** Surface geology. **Extent of Development:** Phillips Pet. Co. has drilled 4 wells. Cusenberry 1 was dry and abnd at 1035 ft; Cauthorn was abandoned at 975 ft; Hollman 1 was drilled to 6635 ft and abnd, elevation was 2247 ft and Pensylvanian was topped at 3485 ft; Hollman 2 was drilled to 8230 ft, elevation 2250 ft, Pennsylvanian was topped at 3485 ft and Ordovician at 7565 ft. It had a number of shows of gas.

PETERSON*

Centering around Wyatt Survey, just w of nw corner of Real County, but in Edwards County. **Means of Discovery:** Surface geology. **Extent of Discovery:** Several wells have been drilled. K. K. Stout drilled Peterson 1 and 2 in 1926, going to 2850 ft and 4600 ft, respectively. Gas shows encountered around 3910 ft. James Daiglish's Peterson drilled to 5206 ft and got top Ellenberger below 4250 ft. It has gas shows between 3905-50 ft. Transcontinental Oil Co.'s Peterson 1 drilled to 3962 ft, elevation 2360 ft, and topped Pennsylvanian at 1400 ft. No production developed to date.

RIGSBY*

Centering around Section 16. GC&SF Survey, about 15 mi ne of Rock Springs. **Extent of Development:** Dan Auld et al took a farm out on Mrs. Mamie Rigsby land from The Texas Co. and drilled Ordovician test to 3952 ft, abandoning June 10, 1937. Well had elevation 2291 ft, topped Ellenberger 3874 ft, recovered a bailer of 26 gravity sweet oil in 12 hours 3920-22 ft, hard lime 3922-43 ft, warm salt water in lime 3943-50 ft. Test considerably higher than another drilled in the same area.

WHITEHEAD*

On Val Verde County line and about 12 mi s of n line of county. **Means of Discovery:** Surface geology. **Extent of Development:** Magnolia Pet. Co. drilled two wells. Whitehead 1 went to 6725 ft, elevation 1770 ft; Whitehead 2 was abandoned at 3502 ft, elevation 1896 ft. E. H. Green et al's Whitehead abandoned at 3500 and has several shows one just above total depth. Several wells drilled to Glenrose-Trinity series above 1000 ft showed a little thick heavy oil.

FRIO COUNTY

BIG FOOT*

Centering around Section 139, near Bigfoot in ne corner of county. **Means of Discovery:** Geological information, known faulting in area evidenced at surface. **Extent of Development:** About 6 wells drilled in general area. Wray & Dunbar's Burns 1, drilled early in 1931, blew out at 2311-68 ft showing about 1000 lbs pressure with little volume of gas. It was deepened to 3708 ft in Edwards lime topped at 3662 ft, showing oil stains, but developing sulphur water on completion attempt. Elevation on the well was 643 ft. Several other wells were drilled, none finding production. Shoemaker et al drilled M. Roach Estate 1 to 2390 ft where it developed 600 lbs pressure, a little oil and a small gas volume. It was carried ahead to 4005 ft and abandoned July 18, 1935. All gas showings were in the Navarro-Taylor section.

DOERING‡

M. L. Carranza Survey 302, about 20 mi sw of Pearsall. **Discovery Well:** Amerada Petroleum Corp.'s F. Doering 1, completed April 4, 1934, initial prod 1,400,000 cu ft gas per day, depth 6507 ft, 7-in casing set 6060 ft, milled out 5971 ft, sidetrack and drilled to 6459 ft after plugging back original hole. **Means of Discovery:** Geology and geophysics. **Type Structure:** Local high on anticline. **Producing Formation, Depth and Gravity:** Del Rio, Buda, Georgetown and Edwards lime. **Producing Area:** 20 acres. **Extent of Development:** To Jan. 1, 1937: 1 gas well. During 6 months 1937: None. **Deepest Test:** Discovery well. **Daily Production, July 1, 1937:** Gas well shut in. **Outlet:** Local use. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Rycade Oil Corp. and Amerada Pet. Corp.

PEARSALL

S. Blain, Jose Arocha, J. M. Figerina, San Antonio Ditch Co., J. B. Mason, A. Lynch, S. Glenn and others, 4 mi sw Pearsall. **Discovery Well:** Amerada Petroleum Corp.'s Halff & Oppenheimer 2, Dec. 26, 1934, ½-in choke, 360 lbs tubing, 890 lbs casing pressure; total depth 10,050 ft, producing horizon 3907-25 ft.

elev 540 ft; plugged back 3925 ft, casing ripped 3907-15 ft, flowed 8,000,000 cu ft gas 139 bbls fluid, part 24 gr oil and salt water. **Subsequent Discoveries Since July 1, 1936:** Amerada Pet. Corp.'s Halff & Oppenheimer 8, San Antonio Ditch Co. Sur No. 1104, td 6230 ft, elevation 569 ft. Top Edwards lime 6219 ft, 9⅝-in casing 6120 ft. Blew out, ran wild 48 hours, killed and recompleted. Flowed 174 bbls 37.9 gr oil plus 30 percent salt water 11 hours, ½-in choke, 550 lbs working pressure on casing, show 7 million cu ft gas, deepened to 10,341 ft and fishing. **Means of Discovery:** Geological work, core drilling, geophysical work. **Type Structure:** Elongated dome, sand lens in Navarro, fractured chalk section, porous lime on flank of structure. **Producing Formation, Depth & Gravity:** Navarro sand, 3900 ft, 24 gr; Austin chalk, 5600 ft, 28 gr; Buda lime, 5900 ft, 39.6 gr; Edwards lime, 6230 ft, 37.9 gr. **Producing Area:** 2000 acres. **Extent of Development:** To Jan. 1, 1937: 21 wells, 16 oil, 5 failures. During 6 months, 1937: None. **Deepest Test:** Amerada Pet. Co.'s Halff & Oppenheimer 8, 10,341 ft, July 1, 1937. **Estimated Ultimate Recovery:** 22,500,000 bbls. **Production Through 1936:** 391,710 bbls. **Indicated Remaining Reserve:** 22,460,290 bbls. **Daily Production July 1, 1937:** 950 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** Amerada Pet. Corp., Rycade Oil Corp.

SCHATTEL*

Extending ne from Pearsall to Schattel. **Means of Discovery:** Considerable geophysical work done. Core drilled with about 30 core holes ranging down to 2000 ft. **Extent of Development:** Has not been drilled.

SOUTHEAST PEARSALL*

Section 1, BS&F, centering around 12 mi se Pearsall. **Means of Discovery:** Core drilling, some geophysical work. **Extent of Development:** No drilling as yet. **Principal Leaseholders:** Humble Oil & Ref. Co.

WOODWARD*

E. Poor Survey 14, nw cor Frio County. **Means of Discovery:** Geological information, etc. **Extent of Development:** Humble Oil & Ref. Co. drilled two wells. C. B. Woodward 1 abnd in 1934 as result fishing job at 1800 ft. No. 2, 25 ft away, drilled to 2873 ft, or 40 ft in Edwards lime, where it tested 300 ft sulphur water in 30 min. Serpentine from 1783 to 1909 ft, but serpentine was dry, abnd April 15, 1934.

GOLIAD COUNTY

CABEZA CREEK*

S. Vela and M. de J. Yarbo, 3 mi ne Charco. **Means of Discovery:** Geological information led to original drilling. Geophysical work done later. **Extent of Development:** V. F. Neuhaus' J. E. Pettus 1, abnd 3853 ft but later taken over by John F. Camp and Southern Crude Oil Purchasing Co. and deepened to 4386 ft, then plugged back to 4298 ft and completed July 25, 1931, flowing 8,000,000 cu ft gas spraying 110 barrels of fluid, 70 percent salt water and remainder high gravity oil through ¼-in choke at 4293-98 ft. It was in the Pettus sand (Cockfield). Three more wells drilled by Camp and Stanolind Oil & Gas Co., abnd. Thompson Drilling Co.'s Pettus 1, 1100 ft se of discovery, abnd March 15, 1936, at 4751 ft after finding shows at 4601-09 ft in Yegua.

FANNIN*

Centering around Daniel O'Driscoll and S. Parks surveys, 6 mi ne Goliad. **Means of Discovery:** Geophysical and geological work by the Benedum & Trees in 1929. **Extent of Development:** Several wells have been drilled. Gibson Oil Co. and Benedum & Trees' G. B. Parks 1 later taken over by Plymouth Oil Co., drilled to 5267 ft and abnd. In Dec., 1930, it was plugged back to sand at 4520-41 ft, completed as a 3,000,000 cu ft gasser. Plymouth then drilled another well, but had the same trouble around 5000 ft, not being able to get through heaving shale and abnd.

HORDS CREEK

Southerland and Martinez surveys, w portion of county. **Discovery Well:** F. P. Zoch et al's J. R. Kauffman 1, Dec., 1929, 12,000,000 cu ft wet gas, ¼-in choke, 1500 lbs tubing, 1600 lbs rock pressure, total depth 4232 ft, sand 4216-32 ft. **Means of Discovery:** Geological information, trend play, surface indications of faulting. **Type Structure:** Sand lensing backed up against faulting. **Producing Horizon, Depth and Gravity:** Cockfield (Pettus), 4200 ft, wet gas; Yegua, 4500 ft, 47.6 gr. **Producing Area:** 80 acres, 40 acres. **Extent of Development:** To Jan. 1, 1937: 10 wells, 2 oil, 1 gas, 7 failures. During 6 months 1937: 2 failures. **Deepest Test:** Tidal Oil Co.'s Pesira 1, abnd 6004 ft. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** 19,735 bbls. **Indicated Remaining Reserve:** 100,265 bbls. **Daily Production July 1, 1937:** 24 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Sun Oil Co., Brown & Wheeler, Tranwestern Oil Co., Phillips Pet. Co., Magnolia Pet. Co., Continental Oil Co.

LA BAHIA‡

Goliad Town Tract, Range 4, w Goliad townsite. **Discovery Well:** Goliad Oil Co.'s S. E. Cole 1, May 30, 1937, 20,000,000 cu ft gas with spray distillate, 3250 lbs working pressure, drill stem was stuck when well drilled 18-in into sand at 5544 ft and completion was through that pipe. **Means of Discovery:** Magnetometer and geological survey, information on two abnd wells. **Type Structure:** Sand lensing against fault. **Producing Formation, Depth and Gravity:** Cockfield, 5550 ft, 58 gravity, distillate. **Producing Area:** 20 acres, (gas). **Extent of Development:** To Jan. 1, 1937: two wells junked. First six mouths of 1937: one wet gas well. **Deepest Test:** Zeni Oil Co.'s M. Lutenbacher 3, junked Sept. 16, 1936, 5639 ft. **Estimated Ultimate Recovery:** Primarily gas field. **Production Through 1936:** Gas. **Daily Production July 1, 1937:** Small amount of distillate. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Goliad Oil Co., Shell Pet. Corp., Wellington Oil Co., Houston Oil Co., Randon Oil Co., Ohio Oil Co.

MAETZE‡

Centering around Gertrude Baerrera survey, 5 mi nw Fannin. **Discovery Well:** Felmont Oil Corp.'s (was Claude Morgan et al) Maetze 1, Oct. 5, 1936, 519,000 cu ft gas, ⅛-in choke, with 1500 lbs pressure, drilled to 5660 ft, plugged back to 3498 ft, perforated 3463-65 ft, elevation 177 ft, df. Well later sprayed some distillate. **Means of Discovery:** Geophysical survey. **Type Structure:** Apparently an elongated domal proposition with some faulting and sand lensing. Too little work to definitely determine. **Producing Formation, Depth and Gravity:** Vicksburg, 3460 ft, distillate. **Producing Area:** 40 acres. **Extent of Development:** To Jan 1, 1937: one gas, one failure. First Six Months 1937: None. **Deepest Test:** Discovery. **Daily Production July 1, 1937:** Shut in. **Outlet:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Sun Oil Co., Claude Morgan et al, Felmont Oil Corp., Stanolind Oil & Gas Co., Atlantic Ref. Co.

MANHUILLA CREEK*

Centering around W. R. Smith survey, 6 mi nw Goliad. **Means of Discovery:** Geological survey. Some geophysical work done in the general area. **Extent of Development:** Thompson Drilling Co.'s H. Taylor Est. 1, abnd Feb. 3, 1936, at 5301 ft, had sand from 4980-5023 ft which developed 35 lbs pressure and 360 ft mud cut with oil on a 5-min drill-stem test through ⅝-in choke. Elevation 270 ft derrick floor, top Hockleyensis 4055 ft, Yegua 5020 ft.

SARCO CREEK*

Centering around M. J. Rice survey, 3 mi n Sarco Creek and 10 mi s Goliad. **Means of Discovery:** Geological information. Some geophysical work has been done in this general area, hence this may in part be responsible for the discovery. **Extent of Development:** Two wells have been drilled by Keystone Royalties Co. on C. B. Wood tract. First drilled to 5961 ft and drill stem stuck 200 ft off bottom. It was completed as a gasser through the drill stem from sand at 5956-61 ft. The well showed 650 lbs pressure through ⅝-in choke and built 1425 lbs pressure closed in. It showed a little 47.9 gr oil. Elevation 135 ft, derrick floor. Marine Oligocene topped at 2820 ft, Heterostegina 3252 ft, Vicksburg 4678 ft, Hockleyensis 5493 ft, abnd July 25, 1935, after a blowout. Second well 330 ft to the southeast, set casing at 5984 ft after finding sand at 5975-84 ft. Failed to produce through perforations at this sand and was drilled to 6702 ft, plugged back and shot with nitro at 5946-54 ft, where it built up pressure of 1475 lbs shut in. Pressure dropped to 50 lbs when opened and abnd. R. B. Swiger's Carrie Wood 1, block 23, Swiger subdivision, Wood Ranch, George Villa survey, 15 mi s of Goliad, abnd 6004 ft in 1937. Heterostegina was topped at 3118 ft, first Lignite 2817 ft and first oysters 2820 ft. Discorbis topped at 3178 ft, and Vicksburg at 5034 ft. Elevation 146 ft, derrick floor.

SLICK

Obid Marshall survey, 8 mi se Nordheim, DeWitt County line. **Discovery Well:** T. B. Slick et al's W. L. C. Poetter 1, Dec. 22, 1930, 545 bbls 48 gr oil and 10,000,000 cu ft gas, ¼-in choke; total depth 4213 ft, producing horizon 4199-4213 ft, elev 322 ft. **Subsequent Discoveries Since July 1, 1936:** Dirks Brothers' Dr. G. W. Allen 1, completed April 14, 1937, flowing 14 bbls 49 gr oil and 3,000,000 cu ft of gas per day, 1/16-in choke, tubing pressure 1625 lbs, casing pressure 1675 lbs, sand 4376-4404 ft, casing set 4376 ft. **Means of Discovery:** Geological information. **Type Structure:** Folding and faulting; three east-west faults cut structure; considerable sand lensing. **Producing Formation, Depth and Gravity:** Pettus sand of Cockfield section of Jackson, 4200 ft, 48 gr; Yegua, 4400 ft, 49 gr. **Producing Area:** 160 acres, 50 acres in oil. **Extent of Development:** To Jan 1, 1937: 11 wells, 1 oil, 2 gas, 8 failures. First Six Months 1937: 5 wells, 2 gas, 3 failures. **Deepest Test:** T. B. Slick Estate's Riedel 1, abnd 4574 ft in 1932. **Estimated Ultimate Recovery:** 250,000 bbls. **Production Through 1936:** 69,270 bbls. **Indicated Remaining Reserve:** 180,730 bbls. **Daily Production July 1, 1937:** 65 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** G. W. Allen et al, Dirks Brothers, The White Co., George B. White Syndicate, Walter Bode et al, Transwestern Oil Co. **Remarks:** Discovery well abnd and block dormant several years, production restored by subsequent drilling.

WESER

John Hancock Survey, 8 mi n Goliad. **Discovery Well:** The California Co's (Standard Oil Company of Texas) Langrebe 1, Oct. 4, 1936, drilled to 5052 ft, plugged back 4812 ft, flowed 125 bbls 46 gravity oil per day 11/64-choke, tubing 320 lbs, casing 730 lbs, sand 4797-4807 ft. **Means of Discovery:** Geophysical and Geological work. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth and Gravity:** Yegua, 4800 ft, 46 gravity. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 1 oil well. First six months 1937: none. **Deepest Test:** Discovery. **Estimated Ultimate Recovery:** 10,000 bbls. **Production Through 1936:** 2,510 bbls. **Indicated Remaining Reserve:** Abandoned. **Daily Production July 1, 1937:** None. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Standard Oil Co. of Texas, Sun Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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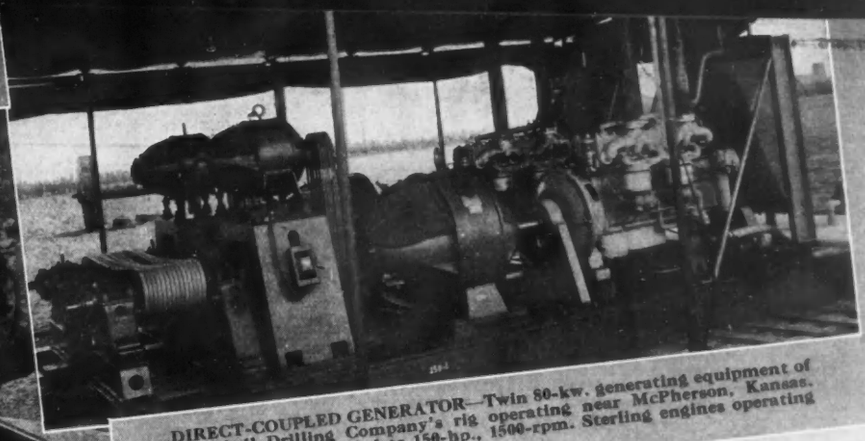

DIRECT-COUPLED GENERATOR—Twin 80-kw. generating equipment of Campbell Drilling Company's rig operating near McPherson, Kansas. Generators are coupled to 150-hp., 1500-rpm. Sterling engines operating on natural gas.

FULL ELECTRIC—This 450-kw. 2-unit belted generating set was seen at the Tulsa Oil Show in May, 1936, where it was in operation as a part of the National Supply Company's complete and interesting exhibit. It is now drilling wells for the Oven Drilling Company, shown on location at Orlando, Oklahoma, driven by two 350-hp., 600-rpm. National-Superior Diesels.

SEMI-ELECTRIC—A semi-electric rig of J. C. Shaffer, Inc., using twin 120-hp. Atlas Imperial Diesel engines driving 150-kw. generator and exciter for variable voltage operation of drawworks. Mud pump is mechanically driven from engine pulley.

TWIN DRAWWORKS MOTOR—Twin 100/200-hp. 450/900-rpm. drawworks motors driving drawworks, J. E. Mabee Consolidated Corp.

MULTIPLE GENERATOR—Engine room of a 6-unit multiple-generator rig of Noble Drilling Co. on location near Prague, Oklahoma. Generators are 60-kw., 1200-rpm., coupled to International engines operating on gas.

Westinghouse

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WESTINGHOUSE ELECTRIC

GONZALES COUNTY

OTTINE

Winslow Turner, James Ruth, J. G. Webb, W. Smith Sur, 4 mi east Luling. **Discovery Well:** Empire Oil & Gas Co. (Sullivan) H. M. Norwood 1, Dec. 19, 1928, 350 bbls 32.7 gravity oil; total depth 4176 ft, crevice 3765-79 ft, 6⅝-in casing 3725 ft, went dead, deepened to 4296 ft, abandoned. **Means of Discovery:** Geological information. **Type Structure:** Production on upthrow side of ne-sw fault, several cross faults in vicinity of field. **Producing Formation, Depth and Gravity:** Crevice in top of Austin chalk, 3750 ft, 32.7 gravity. **Producing Area:** 10 acres. **Extent of Development:** To Jan. 1, 1937: 8 wells, 1 oil, 7 failures. During 6 months 1937; none. **Deepest Test:** J. J. Elam et al 1, abandoned 4407 ft, 1929. **Estimated Ultimate Recovery:** 24,635 bbls. **Production Through 1936:** 24,635 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** None. **Oil Outlet:** None—well abandoned. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** E. B. Starkey et al, Russell Oil Co., Tide Water Associated Oil Co., United North & South Oil Co.

GUADALUPE COUNTY

DARST CREEK

Green DeWitt, Jacob Darst and other surveys, 15 mi e Seguin. **Discovery Well:** The Texas Co.'s Dallas Wilson 1, July 10, 1929, 2000 bbls 36.3 gravity oil, 1-in choke, 2610 ft; producing horizon 2605-10 ft; elev 525 ft. **Means of Discovery:** Geological information, drilling along fault. **Type Structure:** Long narrow producing strip of production on upthrow side of faulting; producing horizon 25 to 45 ft in thickness. **Producing Formation, Depth and Gravity:** Edwards lime, 2600 ft, 32.3 gravity; some production from crevices above lime. **Producing Area:** 1740 acres. **Extent of Development to Jan. 1, 1937:** 314 wells; 286 oil, 28 failures. During 6 months 1937: 7 wells, 5 oil, 2 failures. **Deepest Test:** Diamond Half Oil Co.'s E. Bibbs et al 1, abnd in Trinity, 5510 ft, 1937. **Estimated Ultimate Recovery:** 70,000,000 bbls. **Production Through 1936:** 39,357,509 bbls. **Indicated Remaining Reserve:** 30,642,491 bbls. **Daily Production July 1, 1937:** 7,110 bbls. **Oil Outlets:** Humble Pipe Line Co., Gulf Pipe Line Co., Magnolia Pipe Line Co., and others. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** Abercrombie & Harrison, Empire Gas & Fuel Co., Grayburg Oil Co., Gulf Oil Corp., Horner & Crouch, Humble Oil & Refining Co., La Jita Corporation, Magnolia Petroleum Co., Penn Oil Co., Sun Oil Co., The Texas Co., H. H. Weinert et al, United North & South Oil Co. **Remarks:** Includes production of La Jita Corp. at south end of field, commonly referred to as Camp pool and producing from Austin chalk.

*Prospect. †Salt dome, no production. ‡Gas field.

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MAIERHOFER*

L. A. Peters Sur, 8 mi sw Seguin. **Means of Discovery:** Geological information, trend along known faulting. **Extent of Development:** Several wells drilled into Edwards limestone. Most recent, Nick Marosis et al's Wm. Maierhofer 1, April 10, 1937, as 3,000,000 cu ft gasser in Navarro sand, developing 400 pounds pressure. Well located near Diamond Half's Maierhofer 1 which showed oil in Austin chalk. Marosis test with elevation of 518 ft, topped Austin chalk at 1897 ft, drilled to 2020 ft and set casing. Failed to develop production so carried ahead to 2175 ft in Edwards limestone, showed sulphur water, plugged back to 825 ft, completing in Navarro sand at 815-25 ft. Further development planned.

MANFORD

James Hodges Sur, 7 mi s Luling. **Discovery Well:** Penn Oil Co. (Simms Oil Co.) J. Manford 1, Nov. 31, 1929, 450 bbls 37.3 gravity oil, ½-in choke; total depth 2418 ft, producing horizon 2414-18 ft; elev 442 ft. **Means of Discovery:** Geological information, trend drilling on known fault. **Type Structure:** Crevices on upthrow side of fault. **Producing Formation, Depth and Gravity:** Austin chalk, 2400 ft, 37.3 gravity. **Producing Area:** 40 acres. **Extent of Development to Jan. 1, 1937:** 8 wells, 4 oil, 4 failures. During 6 months, 1937: 1 oil well. **Deepest Test:** Sun Oil Company's J. W. Manford's abnd 2981 ft in Edwards lime, 1930. **Estimated Ultimate Recovery:** 500,000 bbls. **Production Through 1936:** 370,980 bbls. **Indicated Remaining Reserve:** 129,020 bbls. **Daily Production July 1, 1937:** 25 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** R. C. Robbins, Pitzer and West, and R. T. Belcher.

NOLTE

John Sowell Sur, 6 mi e Seguin. **Discovery Well:** Riddle Oil Co.'s E. Nolte et al 1, Jan. 8, 1937, 10 bbls of 33 gravity oil per day, drilled to 1880 ft, plugged back to 1850 ft, acidized. Top chalk 1790 ft, top saturation 1740 ft. **Means of Discovery:** Geological information; drilling along known fault. **Type Structure:** Crevice area in fault plane. **Producing Formation, Depth and Gravity:** Austin chalk, 1850 ft, 33 gravity. **Producing Area:** 10 acres. **Extent of Development to June, 1937:** 2 wells, 1 oil, 1 failure. **Deepest Test:** Riddle Oil Co.'s E. Nolte et al 2, abnd May 17, 1937, dry in Austin chalk topped at 1811 and drilled to 1955 ft. **Estimated Ultimate Recovery:** 10,000 bbls. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Riddle Oil Co., Scott Townsend. **Remarks:** Appears to be a one-well proposition.

SAL-MAR

L. Bollinger Sur, 9 mi e Seguin. **Discovery Well:** Sal-Mar Oil Co.'s A. H. Zunker 1, June 15, 1932, 400 bbls oil, ¾-in choke; total depth 2042 ft, producing horizon 2022-42 ft, top Austin chalk 2022 ft. **Means of Discovery:** Geological data. **Type Structure:** Crevice on faulting. **Producing Formation, Depth and Gravity:** Austin chalk, 2050 ft, 32 gravity. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 9 wells, 1 oil, 8 failures. During 6 months 1937: none. **Deepest Test:** Brogan & Wormser's F. A. Pfullman 1, abnd 2364 ft. **Estimated Ultimate Recovery:** 20,000 bbls. **Production Through 1936:** 10,750 bbls. **Indicated Remaining Reserve:** 9,250 bbls. **Daily Production July 1, 1937:** Abnd. **Rigs Running July 1, 1937:** 1.

SOUTH DARST CREEK

J. K. Davis, Green DeWitt Surs, 9 mi se Seguin. **Discovery Well:** J. E. Clark's W. B. (Katie) Lay 1, Aug. 7, 1935, pumping 350 bbls 34.5 gravity oil; total depth 2446 ft, producing horizon 2372-2446 ft, elev 450 ft. **Means of Discovery:** Trend play, geological data. **Type Structure:** Crevice area on main Darst Creek faulting. **Producing Formation, Depth and Gravity:** Broken Austin chalk, 2400 ft, 34.5 gravity. **Producing Area:** 140 acres. **Extent of Development to Jan. 1, 1937:** 12 wells, 11 oil, 1 failure; during 6 months 1937; 19 wells, 15 oil, 4 failures. **Estimated Ultimate Recovery:** 600,000 bbls. **Production Through 1936:** 142,240 bbls. **Indicated Remaining Reserve:** 457,760 bbls. **Daily Production July 1, 1937:** 690 bbls. **Oil Outlets:** Humble Pipe Line Co. and Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** Romana Oil Co., Stagal Oil Co., J. E. Clark, Amy Oil Co., Doody Oil Co., Kennedy & Crowley, The Whitex Co., Saxet Producing Co., Riddle Oil Co., Freeman Oil Co., Harrison & Danvers, Marts & Bevans, W. E. Wilkerson-Lipscomb-Staats, E. C. Bobb, V. G. Schinmell.

STAPLES

Cyrus Campbell Sur, ½ mi n Staples. **Discovery Well:** Henadena Oil Co.'s Lowman 1, Oct. 9, 1935, 10 bbls oil; total depth 720 ft, producing horizon 694-720 ft. **Means of Discovery:** Geological data, trend drilling along fault. **Type Structure:** Fractured area along upthrow side of fault. **Producing Formation, Depth and Gravity:** Austin chalk, 200 ft, 23 gravity. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 8 wells, 3 oil, 2 failures; during 6 months 1937; none. **Deepest Test:** H. P. Suggs & L. R. Reed's J. H. Sherrill 1, abnd 1262 ft, April 1, 1936. **Estimated Ultimate Recovery:** 1785 bbls. **Production Through 1936:** 1785 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Hopkins Brothers.

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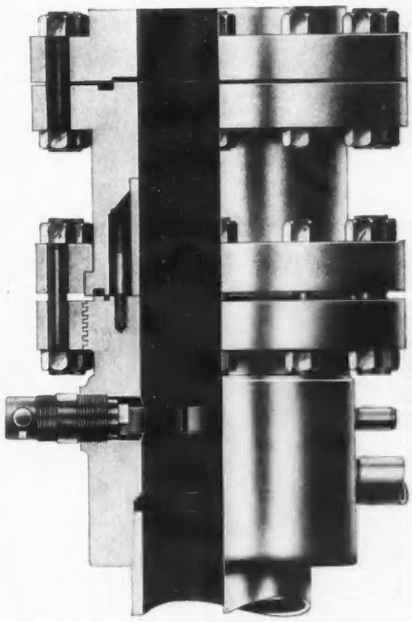
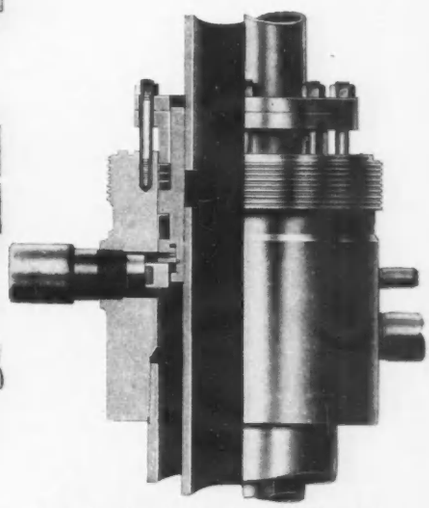
NEW GULFCO TRUE FULL-HOLE RETRACTABLE SEAT CASING HEAD

TYPE "J"



View showing head while well is being drilled and also retracted position of dogs of Retractable Seat while casing is being run.



View showing head after well has been completed. Half turn of lever (on outside of head) has advanced seat dogs to supporting position.

6,000 lbs., 10,000 lbs. Test Pressures

FULL OPENING: Same I.D. as I.D. of casing used, permitting any tool that can be used in the casing to be run through the head without the necessity of making any changes of equipment on the head.

Permits the setting of casing at any point in the well as the suspension can be raised or lowered through head as desired.

Not necessary to use blowout preventer of larger size, or to rebore to larger size, to take care of suspension.

★ **BY SIMPLY MAKING A HALF TURN OF A SMALL LEVER** the retractable Seat, which normally remains withdrawn into housing in the inner wall of head, is easily advanced to a position for supporting the inner casing. The dogs of seat form practically a solid, uniform supporting ring of enormous strength. **In a test in the presence of engineers of major oil companies, seat withstood a load of 630,000 pounds.**

★ **EASY TO STRETCH CASING AFTER CEMENTING** by simply pulling up until flange coupling is above retracted hanger. Then turn lever on outside of head. This advances the seat so that flange coupling can rest upon it.

★ **SAVES 10 TO 15 HOURS TIME:** Crew does not have to remove blowout preventer before casing can be set. The Gulfco head is on the well at all times, ready for instant use, **a feature that may in an emergency, save the entire investment in the well.**

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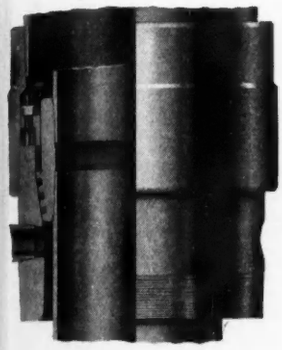
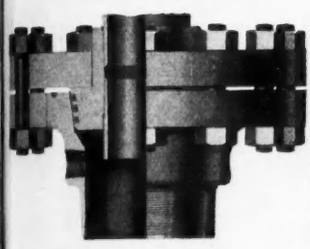


GULFCO Forged Steel Casing Heads

TYPE M

3000 lbs., 6000 lbs. test pressures.

For both low and high pressure wells. Provided with adapter nipple for connecting blowout preventer.

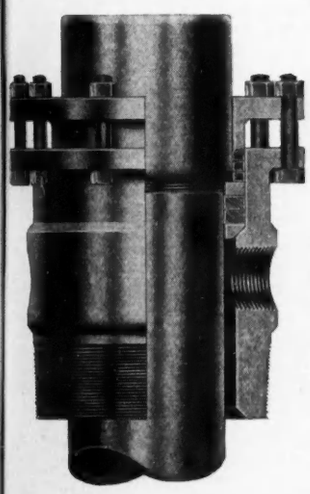


GULFCO Forged Steel Casing Heads

TYPE M1

3000 lbs., 6000 lbs.. test pressures.

Open hole type head with flanged body to be used for drilling through, running casing and tubing. Blowout preventer is bolted down on the flanged body. Can be furnished with groove for steel ring, or hydraulic packing.



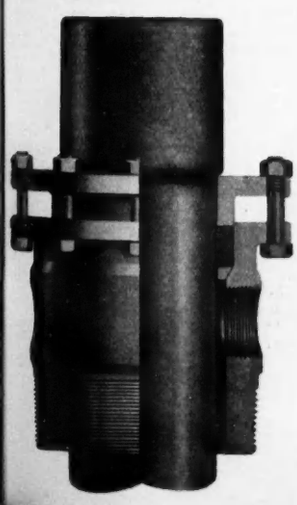
GULFCO Forged Steel Repackable Casing Heads and Braden Heads

TYPE A

2000 lbs., 4000 lbs., 6000 lbs. test pressures. Male or female threads.

High pressure asbestos packing.

Lower packing acts as seal-off while changing the upper packing.



GULFCO Louisiana Pattern Forged Steel Casing Heads

TYPE B

1500 to 3000 lbs., and 3500 to 6000 lbs. test pressures.

Flax or high pressure asbestos packing optional.

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TIDAL SELIGMAN*

N. J. Williamson Sur, 10 mi. s Seguin. **Means of Discovery:** Trend drilling on known fault and geological information. **Extent of Development:** Tidal Oil Co.'s J. Seligman 1; blew out from a crevice in the Austin chalk at 2464-67 ft after topping Austin chalk 2 ft higher. It was killed, 8⅛-in casing set at 2462 ft and completion attempted at 2510 ft. It made about 750 bbls of oil during the next several days, went dead and was deepened to 2804 ft, abnd June 11, 1930. Josey Oil Corp. now drilling on same tract, 150 ft nw of above well.

ZOBOROSKI

J. D. Clements, DeWitt, Branch and Sowell Surs, 12 mi e Seguin. **Discovery Well:** W. J. Walton et al, Anton Zoboroski 1, July, 1931, 15 bbls 34.5 gravity oil per day; total depth 2205 ft, producing horizon 2100-05 ft, elevation 436 ft; 6⅝-in 2125 ft. **Means of Discovery:** Geological information, trend drilling along fault. **Type Structure:** Fractured chalk area along ne-sw fault, production on upthrow side of fault. **Producing Formation, Depth and Gravity:** Navarro sand, 950 ft, gas; Austin chalk, 2200 ft, 34.5 gravity. **Producing Area:** 180 acres. **Extent of Development to Jan. 1, 1937:** 15 wells, 12 oil, 1 gas, 2 failures; during 6 months 1937: 10 wells, 7 oil, 3 failures. **Deepest Test:** Adams & Lyles E. Zoboroski 1, 2722 ft; abnd Jan. 5, 1930 in Edwards topped 2665 ft, taken over April 26, 1936 by Crouch et al, plugged back to 2210 ft and completed June 22, 1936 as 35-bbl per day well. **Estimated Ultimate Recovery:** 800,000 bbls. **Production Through 1936:** 41,774 bbls. **Indicated Remaining Reserve:** 758,226 bbls. **Daily Production July 1, 1937:** 310 bbls. **Oil Outlets:** Crouch Oil Co., Grayburg Oil Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** W. J. Walton and K. L. Crouch, Foust Oil Corp., Grayburg Oil Co., Felmont Oil Corp., R. B. Byrd and Ogden & Reed.

HIDALGO COUNTY

FERNANDEZ*

Porciones 45 and 46. 3½ mi n Havana. **Means of Discovery:** Geological information. **Extent of Development:** Dale L. Smith Oil Co. drilled 3 wells on the A. H. Fernandez tract, No. 4, abnd 2330 ft. No. 5 drilled to 4026 ft and made a gasser and No. 6 went to 3760 ft and abnd. D. M. C. Oil Co. (Downey & Morton) Osca Daskam abnd Sept. 28, 1935, at 4115 ft. Encountered sand 4090 to 4100 ft showing gas, and sand 4102-4114 ft developed oil and salt water. Daskam Bros' Osca Daskam 2, center lot 14-A Daskam subdivision in porcion 45, was drilled to 4256 ft and abnd in 1937 after running electric formation test.

LA BLANCA

Centering around La Blanca Grant, 8 mi e Edinburg. **Discovery Well:** Pantana Oil Co. & Speed Drilling Co. et al's R. E. Harding 1, blew out Oct. 4, 1936, at 7840 ft, ran wild, caught fire, cratered and finally bridged. **Means of Discovery:** Geophysical survey. **Type Structure:** Likely domal type structure, similar to deep seated salt deme, no salt encountered to 9,000 ft. **Producing Formation, Depth and Gravity:** 6650 ft, 62 gravity; 7900 ft, 48 gravity. **Producing Area:** 240 acres. **Extent of Development to Jan. 1, 1937:** 2 failures; during 6 months, 1937: 3 oil wells. **Deepest Test:** Quintana Petroleum Corp.'s Engelman 1, abnd 8893 ft June 29, 1936, junked with drill pipe stuck. Elevation 79 ft. derrick floor, top Catahoula 4021 ft, Discorbis 4783 ft, Frio 5200 ft, Vicksburg 8813 ft. **Estimated Ultimate Recovery:** 3,200,000 bbls. **Production Through 1936:** None. **Indicated Remaining Reserve:** 3,200,000 bbls. **Daily Production July 1, 1937:** 205 bbls. **Oil Outlet:** Local refinery and gasoline plant. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Pantana Oil Co., Gulf States Oil Co., Davenport & Swallow, Fohs Oil Co., Atlantic Refining Co., Quintana Petroleum Corp., Phillips Petroleum Co. **Remarks:** Insufficient work done to adequately predict importance of field. Deepest in South Texas.

MERCEDES

Sections 58, 59, 60, 85 and 86 of the north Capisallo District, Llano Grande grant, 6 mi n Mercedes. **Discovery Well:** Union Sulphur Co.'s American Rio Grande Land & Irrigation Co. 3, April 10, 1935, 600 bbls 49.2 gravity oil, ¼-in choke; 2200 lbs tubing, 2450 lbs casing pressure; total depth 7493 ft, producing horizon 7477-93 ft, elev 60 ft. Recompleted 185 bbls, 2½-in choke, 770 lbs tubing, 850 lbs casing pressure. **Means of Discovery:** Geophysical information. **Type Structure:** Domal structure cut by faulting. **Producing Formation, Depth and Gravity:** Frio, 7500 ft, 49.2 gravity. **Producing Area:** 1000 acres, 450 acres oil. **Extent of Development to Jan. 1, 1937:** 10 wells, 5 oil, 2 gas, 3 failures; during 6 months 1937: 1 failure. **Deepest Test:** Union Sulphur Co.'s American 10, 8306 ft, 1937. **Estimated Ultimate Recovery:** 2,000,000 bbls. **Production Through 1936:** 79,047 bbls. **Indicated Remaining Reserve:** 1,920,953 bbls. **Daily Production July 1, 1937:** 105 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Union Sulphur Co. controls block.

MESTINAS‡

Mestinas grant, 8 mi ne Edinburg. **Discovery Well:** Gulf States Oil Co.'s J. C. Engelman 1, Aug. 1, 1935, 30 bbls 60 gravity oil, ¼-in and ⅜-in chokes, 1840 lbs casing pressure; total depth 7508 ft, producing horizon 6658-6748 ft, plugged back 6770 ft, set perforated pipe, made 18,000,000 cu ft gas with distillate. **Means of Discovery:** Geophysical survey. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** Frio, 6750 ft, 52 gravity distillate. **Producing Area:** 80 acres, none in oil. **Extent of Development to Jan. 1, 1937:** 1 well completed, 1 failure; during 6 months 1937: 1 failure. **Deepest Test:** Gulf States Oil Co.'s J. C. Engelman 3, abnd April 4, 1937, at 8110 ft. **Estimated Ultimate Recovery:** Gas. **Production Through 1936:** 1,226 bbls. **Indicated Remaining Reserve:** Gas. **Daily Production July 1, 1937:** Gas. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Gulf States Development Co., Sun Oil Co., Union Sulphur Co., McCollum Exploration Co., Fohs Oil Co.

SAMFORDYCE

Hidalgo and Starr Counties, Porciones 38, 39, 40, 41, 99 and 100, ne Samfordyce. **Discovery Well:** Otto Wood's Lawrence 1, Sept. 28, 1934, 500 bbls 20.7 gravity oil, ½-in choke; 400 lbs tubing, 800 lbs casing pressure; producing horizon 2737-53 ft, 6⅝-in casing 2730 ft. Casing commenced leaking when well attempted to blow out and flow gas allowed through opened tubing and casing. The output increasing to 25,000 bbls per day. **Means of Discovery:** Geological information, geophysical work and showing of dry holes in the immediate vicinity. **Type Structure:** Anticlinal structure with sand lens flanking a nw-se trend on sw. **Producing Formation, Depth and Gravity:** Frio, 2750 ft, 21 gravity; 2850 ft, 24 gravity; 2950 ft, 24.5 gravity. **Producing Area:** 2200 acres, 1240 acres oil. **Extent of Development to Jan. 1, 1937:** 210 wells, 173 oil, 8 gas, 29 failures; during 6 months, 1937: 20 wells, 11 oil, 3 gas, 6 failures. **Deepest Test:** Heep Oil Corp. Jackson 1, abnd 4136 ft in Vicksburg. **Estimated Ultimate Recovery:** 22,500,000 bbls. **Production Through 1936:** 3,211,118 bbls. **Indicated Remaining Reserve:** 19,288,882 bbls. **Daily Production July 1, 1937:** 5845 bbls. **Oil Outlet:** Valley Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** James H. Anderson, Ben G. Barnett Petroleum Corp., Bridwell Oil Co., Cordell Oil Co., Cortez Oil Co., Dean Bros., E. P. Dayvault, Ralph E. Fair, Inc., Gem Oil Co., Hiram M. Reed, B. H. Rogers, B. H. Rogers et al, Gholson & Clements, Skelly Oil Co., J. L. Staff & Heep Oil Co., Sun Oil Co., Val-Tex Oil Co., Weekly Oil Corp., Windsor Oil Co., Lucky & Blocker, Moncrief & Showers, Moran Corp., Mortex Oil Corp., Navarro Oil Corp., Phillips Petroleum Co., H. J. Porter, Ernest Powell, Frank Powell, Graham-Edwards, Harris-Davis-Bishop-Harrison-Danvers, Heep Oil Co., Henshaw Bros., Hill & Hill, Inc., W. F. Lacy.

JACKSON COUNTY

EDNA

F. Rodriguez & Narcisco surveys. 5 mi nw of Edna. **Discovery Well:** Jackson County Oil Syndicate (Wright Brothers) S. G. Drushell 1, blew out December 18, 1921, ran wild, 2670 ft, estimated 10,000,000 cu. ft gas, killed and abandoned, Jan. 1, 1922, total depth 2670 ft, set 6-inch casing 2265 ft, but not cemented. Elev. 94 ft. **Subsequent Discoveries since July 1, 1936:** Steinberger Petr. & Chicago Gulf Oil Corp.'s Lon Rogers 1, Rodriguez sur, total depth 5040 ft, 10 bbls distillate per day, 1/8-inch choke, tubing 1850 pounds, casing 2000 pounds; plugged back 4788 ft, perforations 4777-87 ft, March 9, 1937. Steinberger Petroleum Corp.'s S. G. Druschell 1, Oct. 14, 1936, total depth 7180 ft, sand 4637-56 ft, perforated 4640-50 ft, 1,800,000 cu ft gas and 15 bbls 46 gravity distillate through 5/32-inch choke, tubing pressure 1900 lbs, casing pressure 1950 lbs. Opened new sand. **Means of Discovery:** Geological information. Geophysical work later done to determine structure condition for deeper development. Original discovery credited to surface work. **Type Structure:** Closed domal structure, actual amount of closure in doubt but known to exceed 300 ft and cover an area of about 6000 acres. **Producing Formation, Depth and Gravity:** Catahoula, 2200 to 2800 ft, several gas sands; Frio 3950 ft gas; 4650 ft, 46 gravity; 4780 ft, distillate, 5350 ft, distillate. **Producing Area:** 250 acres. **Extent of Development to Jan. 1, 1937:** 19 wells, 12 gas, 7 failures; during 6 months, 1937: 2 gas wells. **Deepest Test:** Steinberger Petroleum Corp.'s S. G. Drushell 1, 7155 ft. **Estimated Ultimate Recovery:** Gas field, approx. 15,000 bbls distillate prod. **Daily Production July 1, 1937:** Gas and slight bit of distillate. **Oil Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Chicago Gulf Oil Corp., Steinberger Petroleum Corp.

GANADO

Section 4 Morris & Cummings Survey, 5 mi se Ganado. **Discovery Well:** The Texas Co.'s T. N. Mauritz 1, April 13, 1937, 65 bbls 26.1 gravity oil, 1,225,000 cu ft gas, 3/16-in choke, tubing 1625 lbs., casing 1675 lbs., sand 5087-5112 ft. **Means of Discovery:** Geophysical prospect. **Type Structure:** Sand lensing, probably some nosing. **Producing Formation, Depth and Gravity:** Marginulina, 5100 ft, 26 gravity. **Producing Area:** 20 acres. **Extent of Development:** One oil well, above. **Deepest Test:** The Texas Company's Martin Hultgust 1, active July 1, 1937, 5150 ft. **Estimated Ultimate Recovery:** 100,000 bbls. **Daily Production July 1, 1937:** 100 bbls. **Oil Outlet:** Texas Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholder:** The Texas Company.

MAURITZ

Section 33, Moriss & Cummings Survey, 4 mi s Louise field. **Discovery Well:** Shell Petroleum Corp.'s C. F. Combs 1, June 19, 1935, 633 bbls 27.6 gravity oil, ¼-in choke, 850 lbs tubing, 900 lbs casing pressure; total depth 5650 ft, sand 5634-50 ft, 7-in casing set 5630 ft, elev 90 ft. **Means of Discovery:** Torsion balance, reflection seismograph and subsurface geology based on deep dry hole. **Type Structure:** Small fault and sand lens. **Producing Formation, Depth and Gravity:** Frio, 5600 ft, 27.6 gravity. **Producing Area:** 30 acres. **Extent of Development to Jan. 1, 1937:** 6 wells, 1 oil, 5 failures. During 6 months, 1937: 1 oil well. **Deepest Test:** Shell's McCrory 1, abnd 7408 ft in Vicksburg, June

*Prospect. †Salt dome, no production. ‡Gas field.

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1935. **Estimated Ultimate Recovery:** 240,000 bbls. **Production Through 1936:** 62,350 bbls. **Indicated Remaining Reserve:** 177,650 bbls. **Daily Production July 1, 1937:** 178 bbls. **Oil Outlet:** The Texas Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Shell Petroleum Corp., T&P Coal & Oil Co., Venza Oil Corp., Smith & McDonald, Pure Oil Co.

VANDERBILT

Musquiz Survey, ½ mi se Vanderbilt. **Discovery Well:** Encino Oil & Gas Co.'s F. E. Toney 1, May, 1934, 528 bbls 33 gravity oil, ¼-in choke, 800 lbs tubing, 900 lbs casing pressure; total depth 5528 ft, producing horizon 5575-82 ft. **Means of Discovery:** Geological information. Among other indications was a 1000-ft artesian well at Vanderbilt which showed gas, and several oil shows in wells by Vanderbilt Petroleum Co. in north central portion of Musquiz Survey. **Type Structure:** Sand lenses against fault. **Producing Formation, Depth and Gravity:** Frio, 5500 ft, 33 gravity. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 5 wells, 1 oil, 4 failures. During 6 months, 1937: none. **Deepest Test:** Phillips Petroleum Co.'s Drummond 1, abnd 7042 ft in Frio, Nov. 1934. **Estimated Ultimate Recovery:** 1,600,000 bbls. **Production Through 1936:** 100,053 bbls. **Indicated Remaining Reserve:** 499,947 bbls. **Daily Production July 1, 1937:** 85 bbls. **Oil Outlet:** Loading racks at Vanderbilt. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Phillips Petroleum Co., Humble Oil & Refining Co., Magnolia Petroleum Co., The Texas Co.

JIM HOGG COUNTY

ALWORTH

Section 39, extreme nw part of county. **Discovery Well:** Alworth Drilling Co.'s M. Garza 2, Nov. 23, 1926, 100 bbls of 21 gravity oil and 10,000,000 cu ft gas; total depth 1025 ft, sand 1020-25 ft; 6⅝-in casing 1018 ft; elev 488 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** On monoclinal sand lensing structure. **Producing Formation, Depth and Gravity:** Upper Jackson series, 1000 ft, 21 gravity. **Producing Area:** 650 acres. 80 acres oil. **Extent of Development to Jan. 1, 1937:** 27 wells, 8 oil, 4 gas, 15 failures. During 6 months, 1937: 4 wells, 2 gas, 2 failures. **Deepest Test:** Simms Oil Co.'s J. B. Leyendecker 1, abnd 2199 ft. **Estimated Ultimate Recovery:** 27,793 bbls. **Production Through 1936:** 27,793 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** None. **Oil Outlet:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Alworth et al, Brooklyn Oil Co., Simms Oil Co., H. Maddox.

COLORADO

Section 623, 1 mi s Guerra. **Discovery Well:** J. H. Meek et al's F. G. Martinez 1-A, Aug. 6, 1936, 25 bbls 47.4 gravity oil, 65 lbs tubing, 185 lbs casing pressure; total depth 3017 ft, producing horizon 3009-17 ft. **Means of Discovery:** Geological information. **Type Structure:** Likely sand lens on Monocline. **Producing Formation, Depth and Gravity:** Cockfield, 3000 ft, 47.4 gravity. **Producing Area:** 10 acres. **Extent of Development:** To Jan. 1, 1937: 6 wells, 1 oil, 5 failures. During 6 months, 1937: 1 failure. **Deepest Test:** J. H. Meek, Jr.'s Martinez Estate 3-A, Survey 623, abnd 3202 ft, Feb. 16, 1936; set 5 3/16 at 3185 ft, perforated 2997-3104 ft. **Estimated Ultimate Recovery:** 40,000 bbls. **Production Through 1936:** 5448 bbls. **Indicated Remaining Reserve:** 34,552 bbls. **Daily Production July 1, 1937:** None. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** J. H. Meek et al, Humble Oil & Refining Co., Sun Oil Co., V. F. Neubaus.

HENNE-WINCH-FARRIS

Las Animas grant, Surveys 255, 256, 276, El Peyote grant, south of Webb County line and near Zapata County line. **Discovery Well:** Big Bend Oil Co.'s A. Martinez 1, June 23 1924, 60,000,000 cu ft gas, spraying 21 gravity oil; total depth 1960 ft, sand 1944-60 ft; elev 639 ft. **Means of Discovery:** Trend play, geological information. **Type Structure:** Sand lensing on fold, shore line proposition. **Producing Formation:** Hockleyensis zone of the Jackson series, 1960-2100 ft, 21 grav. **Producing Area:** 1160 acres, 720 acres oil. **Extent of Development to Jan. 1, 1937:** 241 wells, 147 oil, 34 gas, 60 failures. During 6 months, 1937: None. **Deepest Test:** Kitselman & St. Albans' R. Holbein 57, Block 40, Survey 17, abnd July 17, 1926, 3546 ft; sands 2398-2402 ft and 2998-3003 ft, tested salt water and gas; elev 706.8 ft. **Estimated Ultimate Recovery:** 3,250,000 bbls. **Production Through 1936:** 3,203,911 bbls. **Indicated Remaining Reserve:** 46,089 bbls. **Daily Production July 1, 1937:** 5 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Stover & Burkett, H. L. Wright, Magnolia Petroleum Co., Argyle Investment Co. and others.

PEYOTE

Survey 573, Share 1, northeastern portion of county. **Discovery Well:** Clark & Cowden's E. Vela 1, Oct. 17, 1932, 8,000,000 cu ft gas; total depth 3209 ft, plugged back to 2140 ft, redrilled to 2263 ft. when first drilled, well showed sand section from 2224-94 ft. **Means of Discovery:** Geological data. **Type Structure:** Is sand lensing similar to remainder of Mirando district. **Producing Formation, Depth and Gravity:** Government Wells sand of Jackson age, 2250 ft gas. **Producing Area:** 20 acres, none in oil. **Extent of Development to Jan. 1, 1937:** 3 wells, 1 gas, 2 failures. During 6 months, 1937: None. **Deepest Test:** Discovery well. **Daily Production July 1, 1937:** Shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Clark & Cowden.

*Prospect. †Salt dome, no production. ‡Gas field.

RANDADO

Including Sections 291, 614, 82, 231, 232, 287, 81, 85, 83, 233, 287, 19, 230, 267 and 415. **Discovery Well:** Conway et al's G. Placios 2, April 21, 1926, 1000 bbls 20.5 gravity oil; total depth 1266 ft; sand 1249-55 ft, elev 478 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lensing structure with several small local highs. **Producing Formation, Depth and Gravity:** Upper Jackson series, 1250 ft, 20.5 gravity. **Producing Area:** 1200 acres, 765 acres oil. **Extent of Development to Jan. 1, 1937:** 237 wells, 176 oil, 15 gas, 46 failures. During 6 months, 1937: 2 failures. **Deepest Test:** Mount Selman test abnd 5222 ft. **Estimated Ultimate Recovery:** 4,750,000 bbls. **Production Through 1936:** 4,365,534 bbls. **Indicated Remaining Reserve:** 384,466 bbls. **Daily Production July 1, 1937:** 312 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** A. E. Glasco, Grayburg Oil Co., R. A. Heffner, Trs. (Randado Oil Co.); Magnolia Petroleum Co., Pitzer & West, Superior Oil & Gas Co., Bob & Richey, Simms Oil Co.

JIM WELLS COUNTY

ARMAGOSA‡

Sections 88, 89, B. Baldwin and Stanley Welch Surveys, 10 mi n Alice. **Discovery Well:** Carsil Oil & Gas Co.'s McGill 1, April 9, 1931, 60,000,000 cu ft gas per day; total depth 2689 ft, elev 150 ft; 5 3/16-in casing set 2682 ft; cap 2681-82 ft; well blew in wild, finally controlled, plugged back and abnd. **Means of Discovery:** Geological information. Surface indications and subsurface correlations. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** Discorbis, Heterostegina zone, Oligocene, several sands 2175-2200 ft, gas. **Producing Area:** 640 acres. **Extent of Development to Jan. 1 1937:** 7 wells, 4 gas, 3 failures. During 6 months, 1937: 1 gas well. **Deepest Test:** Smith & Storey's M. E. Dilworth 1 drilled to 6110 ft, completed 2328-32 ft as gasser, Jan. 5, 1935. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** One. **Principal Leaseholders:** Smith & Story, Tsesmelis & Reese, W. A. Coates, Carsil Oil & Gas Co.

BENTONVILLE-KING

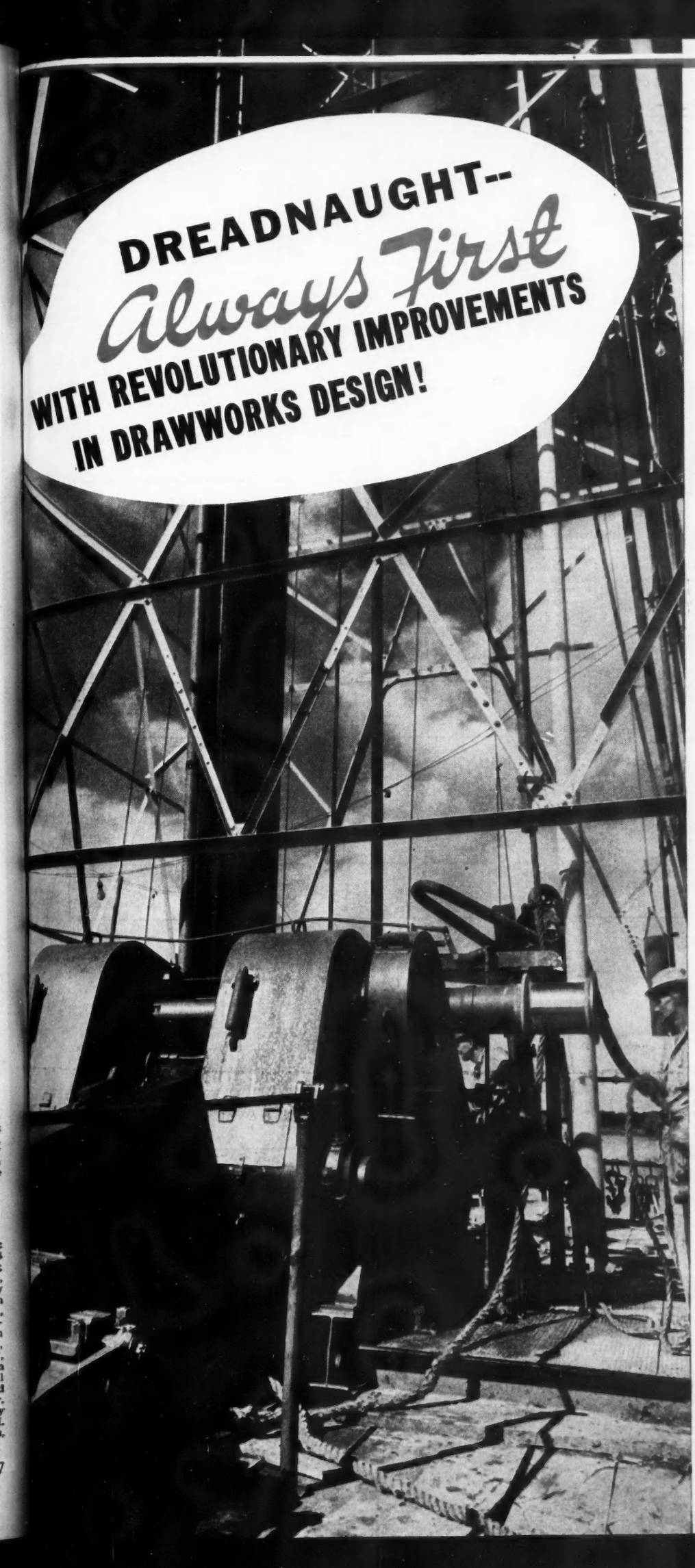
In Jim Wells and Nueces Counties, Sec 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, Richard King Farm lots subdivision, 1 mi n Bentonville. **Discovery Well:** Stanolind Oil & Gas Co. and John F. Camp's Richard King 1, April 16, 1932, 40,000,000 cu ft dry gas, tubing pressure 1100 lbs, casing 1300 lbs; total depth 3899 ft; 7-in casing 3888 ft, sand 3893-99 ft; elev 142 ft. **Subsequent Discoveries Since July 1, 1936:** La Jita Corp.'s Frame & Bowers 2, Sec 14, King Ranch subdivision, Dec. 31, 1936, flowed 8 bbls oil per hour, ⅛ choke, tubing pressure 725, casing pressure 950, gas/oil ratio 485 to 1, 42 gravity, sand 5681-85. **Means of Discovery:** Geophysical information. Topographical high, which is also a inlier of Lissie gravel in the Beaumont clay formation, indicating a surface structure. Oil development followed further geophysical work plus subsurface geological work and drilling of several dry holes. **Type Structure:** No definite information available. There are a number of sand lenses on an anticlinal structure, probably some faulting. **Producing Formation, Depth and Gravity:** Gas sands are in Discorbis-Heterostegina zone, 3800-4000 ft. Frio, 5400 ft; 39.6 gravity; Vicksburg, 5680 ft, 42 gravity. **Producing Area:** 2850 acres, 80 in oil. **Extent of Development to Jan. 1, 1937:** 23 wells, 7 oil, 5 gas, 11 failures. During 6 months, 1937: 7 wells, 2 gas, 5 failures. **Deepest Test:** Texon Royalty & Lucey Petroleum Co.'s Leona Dodd 1, sec 15, King Farm lots, to 6500 ft gas, June, 1936, shut in pressure 1625 lbs, perforations made in 4000-ft sand. **Estimated Ultimate Recovery:** 500,000 bbls. **Production Through 1936:** 9680 bbls. **Indicated Remaining Reserve:** 490,320 bbls. **Daily Production July 1, 1937:** 585 bbls. **Oil Outlet:** Texita Pipe Line to Crude Oil Pipe Line; thence to Corpus Christi. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** John F. Camp Prod. Co., Lucey Petr. Co., Texon-Royalty Co., Tom Graham, Stanolind O&G Co., La Jita Corp.

ORANGE GROVE*

Centering around Joseph Reynolds Survey, 1½ mi w Orange Grove. **Means of Discovery:** Mainly geological survey. **Extent of Development:** Several wells have been drilled in general area. Arkansas Fuel Oil Co.'s G. H. Bierstadt 1, most recent, had elev 205 ft, drilled to 5017 ft and ran electric formation tester, which indicated sand 4798-4827 ft, sidetracked and redrilled, but made salt water. Abnd Mar. 23, 1937.

PREMONT

Centering around Sec 71, near town of Premont. **Discovery Well:** Magnolia Petroleum Co.'s A. A. Sceligson 2, Apr. 5, 1933, 285 bbls fluid, 30 percent sw and 15,000,000 cu ft gas, ½-in choke; 800 lbs tubing, 900 lbs casing pressure; total depth 3255 ft, producing horizon 3247-55 ft. **Subsequent Discoveries Since July 1, 1936:** Tom Graham No. 2-A F. Bennett, Sec 76, Haldeman subdivision, S. K. & K. Sur No. 215, td 2265 ft, sand 2258-61 ft, 14 bbls 3 hours, ⅝-in choke, casing pressure 325 lbs, tubing pressure 150 lbs, 7-inch casing 2265 ft (sand 100 ft shallower than regular 2300-ft zone). C. C. Glasscock's J. C. Ritter 1, Lot 45, Sec 76, Haldeman subdivision, S.K.&.K. Survey 231, Apr. 18, 1937, through perforations 3170-75 ft, 14½ bbls oil per hour, 3/16-in choke, tubing pressure 900 lbs, casing pressure 1000 lbs. Well went to gas and pressure rose to 1400 pounds on tubing; sand 3165-76 ft, total depth 3180 ft. Elevation 225, derrick floor. **Means of Discovery:** Torsion balance and seismograph. Survey indicated possible deep-seated salt dome, some faulting evidenced. **Type Structure:** Domal type structure with series of sand lenses,



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producing area likely rather spotted. **Producing Formation, Depth and Gravity:** Catahoula, 2250 ft, 2350 ft, 3150 ft, 3250 ft, 20-22 gravity. **Producing Area:** 500 acres, 250 acres oil. **Extent of Development to Jan. 1, 1937:** 14 wells, 5 oil, 2 gas, 7 failures. During 6 months, 1937: 29 wells, 19 oil wells, 4 gas, 6 failures. **Deepest Test:** Magnolia Petroleum Co.'s A. A. Seeligson 6, abnd 7135 ft in heaving shale, August 6, 1934. **Estimated Ultimate Recovery:** 1,250,000 bbls. **Production Through 1936:** 8,428 bbls. **Indicated Remaining Reserve:** 1,241,572 bbls. **Daily Production July 1, 1937:** 930 bbls. **Oil Outlet:** Tom Graham has pipe line to railroad loading racks. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** D. B. Cogswell, Diamond Half Oil Co., Morris Gouger, Tom Graham, Securities Royalty Corp., Magnolia Petroleum Co., Gilcrease Oil Co., Sinclair Prairie Oil & Gas Co., Rodney Delange, Transwestern Petroleum Co. **Remarks:** Tom Graham (was R. A. Graddy et al) F. Bennett 1, Lot 87, Sec 76, Haldeman subdivision, 2 mi w field, elev 221 ft, ground completed Oct. 8, 1936 for 125 bbls oil daily on 3/16-in choke, tubing pressure 440 lbs, casing pressure 860 lbs, sand 2340-2350 ft, 50 percent of flow fresh water. This well opened an area to the west referred to as West Premont.

SANDIA

W. D. Wade Ranch, Casa Blanco Grant 2 mi nw Sandia. **Discovery Well:** Larcro Gas & Petroleum Co.'s Wade 1, Nov. 20, 1929, 50,000,000 cu ft gas, 3/16-in choke, 1050 lbs tubing, 1300 lbs casing pressure; total depth 2917 ft, producing horizon 2910-17 ft, elev 149 ft. **Subsequent Discoveries Since July 1, 1936:** Smith Drilling Co.'s W. D. Wade 1, completed June 9, 1937, flowing 66 bbls 52 gravity oil per day, 5/32-in choke, tubing pressure 1750 lbs, casing pressure 1850 lbs. Drilled to 5701 ft, set 7-in casing 5212 ft, perforated 5159-63 ft. **Means of Discovery:** Surface and subsurface geology. **Type Structure:** Elongated low anticline cut to nw by fault, with 70-ft displacement. **Producing Horizon, Depth and Gravity:** Catahoula, 2900 ft, gas; Frio, 4100 ft, 41.5 gravity; Jackson (likely Cole sand) 5150 ft, 52 gravity. **Producing Area:** 240 acres, 80 acres oil. **Extent of Development to Jan. 1, 1937:** 13 wells, 3 gas, 10 failures. During 6 months, 1937: 6 wells completed, 3 oil, 3 failures. **Deepest Test:** Smith Drilling Co.'s W. D. Wade 1, td 5701 ft. **Estimated Ultimate Recovery:** 640,000 bbls. **Indicated Remaining Reserve:** 640,000 bbls. **Daily Production July 1, 1937:** 75 bbls. **Oil Outlet:** Loading racks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** O. W. Killam; Smith Drilling Co., J. E. Walsh. **Remarks:** O. W. Killam's W. D. Wade 8, completed sand 4018-23 2-25-37, flowed 81 bbls 24 hours, 5/32-in choke, 41.5 gravity oil, tubing pressure 1227 lbs, casing pressure 1500 lbs. This sand previously had been discovered but immediately went to water. This well re-established production.

SAN DIEGO‡

Share 3, Diego Grant, 3 mi e San Diego. **Discovery Well:** Roger Putnam et al, E. A. Hawkins 1, Dec. 2, 1935, 10,000,000 cu ft gas, ½-in choke, 1200 lbs tubing, 1260 lbs casing pressure; total depth 2976 ft, producing horizon 2963-76 ft, elev 290 ft (closed in pressure 1260 lbs.). **Means of Discovery:** Geological information. **Type Structure:** Anticline. **Producing Formation, Depth and Gravity:** Frio, 2950 ft, gas. **Producing Area:** 120 acres. **Extent of Development to Jan. 1, 1937:** 2 gas wells. During 6 months 1937: None. **Deepest Test:** Houston Oil Co. et al's E. A. Hawkins et al 2, block 11, Putnam Subd., San Diego Gr., elev 309 ft. derrick floor; drilled to 6480 ft, completed as gasser in sand 2952-57 ft through perforations in 7-inch casing set at 3025 ft, May 25, 1936. **Daily Production July 1, 1937:** Gas. **Outlet:** Houston Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Houston Oil Co.

KARNES COUNTY

BRUNELL‡

James Johnson, A. Germany, A. Storey, J. H. Clark Surveys, 2 mi e Burnell. **Discovery Well:** Norton & Marr et al's M. E. Choate 1, Nov. 19, 1934, 30,000,000 cu ft gas, 1425 lbs shut in pressure; total depth 3550 ft, sand 3299-3327 ft, shale 3327-30 ft, sand 3330-42 ft, elev 382 ft. **Means of Discovery:** Geological information, trend play, geophysical work. **Type Structure:** Folding and faulting. **Producing Formation, Depth and Gravity:** Cockfield (Pettus), 3300 ft, gas. **Producing Area:** 1250 acres. **Extent of Development to Jan. 1, 1937:** 13 wells, 7 gas, 6 failures. During 6 months, 1937: 1 gas. **Deepest Test:** Luling Oil & Gas Co.'s W. W. Boyce 1, abnd 3741 ft, May 27, 1935. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Lonnie Glasscock, Magnolia Petroleum Co., Marr & Norton, Herman Brown, United Production Corp., American Liberty Oil Co.

GREEN*

Southwestern portion of Carlos Martinez Grant, west of highway and railroad and midway between Green and Burnell. **Means of Discovery:** Geological information and trend drilling on apparent surface faulting. **Extent of Development:** Four wells have been drilled. Fort Bend Oil Co.'s J. F. Newberry 1, Oct. 14, 1930, encountered sand at 2964-75 ft which developed 700 lbs dry gas pressure on 4-minute drill-stem test through 3/8-in choke, 6⅝-inch 2958 ft. Made a little gas, but when deepened slightly developed salt water. Luling Oil & Gas Company's Wheeler Holmes 1, 2 mi s Green in Carlos Martinez survey, abnd 3302 ft on October 13, 1936. Topped Pettus 2804 ft, good oil show but had only little sandy shale. Several other wells were drilled in the immediate vicinity, but failed to produce.

*Prospect. †Salt dome, no production. ‡Gas field.

NORTH PETTUS

In corner of Karnes-Goliad-Bee Counties, W. J. Porter, George Habbermacher, Brooks & Burleson, Nos. 23 and 25, Javiano Gomez, Porter State E. Talley. **Discovery Well:** William F. Morgan et al's McKinney 1, April 23, 1930, 20,000,000 cu ft gas, spraying distillate; total depth 3891 ft, sand 3881-91 ft; casing 1500 lbs, tubing pressure 1000 lbs, 6⅝-in csg 3880 ft. United Production Co.'s G. A. Ray 47, Nov. 16, 1934, 10,000,000 cu ft gas spraying small quantity oil, tubing 125 lbs., casing 150 lbs; total depth 3958 ft, sand 3932-45 ft and 3945-58 ft, 7-in casing 3950 ft, elev 386 ft. This well opened Yegua sand production on the western side of the field. Since that time, however, production in same horizon has been proved on the eastern side of field which is oil. **Type Structure:** Sand lenses backed up against several faults, well broken by cross faults. **Producing Formation, Depth and Gravity:** Cockfield in Jackson series, locally called Pettus sand, 3600-3800 ft, 42 gravity; Yegua 3800-3900 ft, 44 gravity. **Producing Area:** 1200 acres, 860 acres oil. **Extent of Development to Jan. 1, 1937:** 112 wells, 87 oil, 11 gas, 14 failures. During 6 months, 1937: 9 wells, 8 oil, 1 failure. **Deepest Test:** Moody-Seagraves Oil Corp.'s C. W. Boyce 1, abnd 5259 ft. **Estimated Ultimate Recovery:** 8,500,000 bbls. **Production Through 1936:** 1,956,652 bbls. **Indicated Remaining Reserve:** 6,543,348 bbls. **Daily Production July 1, 1937:** 1865 bbls. **Oil Outlet:** Atlantic Pipe Line Co., Houston Pipe Line Co., Pettus Refining Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** United Production Corp., Houston Oil Co., Magnolia Petroleum Co., Jane Oil Co., Diamond Half Oil Co., Henshaw Brothers.

KENDALL COUNTY

SISTERDALE*

John F. Torrey Survey No. 781, near Sisterdale. **Means of Discovery:** Surface geology. **Extent of Development:** Six wells were drilled, 5 failures, 1 oil well. Sterling et al's Willie Werner 1, March 17, 1930; 20 bbls 31 gravity oil and some water; total depth 975 ft, broken sandy lime 954-75 ft, elev 1387 ft. Producing horizon is likely Pennsylvanian and Ordovician. About 2500 bbls oil recovered and well abnd.

KENNEDY COUNTY

PINTA HILL*

In northeastern portion of "Santa Quiteria" on Ramon Cabasos Gueria Survey, adjoining Brooks County line. **Means of Discovery:** Topographic high and a fresh water lake constitute the indication of a dome although there has been no confirmation by drilling. **Extent of Development:** None.

KERR COUNTY

LOVE RANCH*

Centering around J. Martinez Survey 1594, in the southwestern corner of county, 45 mi w Kerrville. **Means of Discovery:** Geological information based on surface indications. **Extent of Development:** Thirteen wells have been drilled in area. Evans & Gant's Jeff Love 1, Dec. 23, 1930, 65 bbls 39.8 gravity oil and considerable water in 3 hrs from sand 3374-91 ft, caught fire, burned for several days and finally killed. Salt water flow increased and could not be cut off. Well had sands at 2544-63, 3490-3505 ft as well as at level in which completion was attempted. Abnd at 4060 ft. Love 2 found shows in Mississippian at 5540-5830 ft, striking a porous lime at 5826-30 ft in which it filled with 34 gravity black oil, but went to salt water when deepened to 5850 ft. Sand at 3055-60 ft in Pennsylvanian showed oil. Elev 2380 ft, abnd 5870 ft. Other tests have had shows.

KLEBERG COUNTY

KINGSVILLE

Sections 37, 38, 39, 40 and 41, s Kingsville. **Discovery Well:** Kleberg Oil & Gas Co.'s Rosse 1, 1920, 50,000,000 cu ft, 2143 ft. **Subsequent Discoveries Since July 1, 1936:** Humble Oil & Ref. Co.'s R. J. Kleberg 9, April 22, 1937, flowed 4 bbls oil per hour 3/16-in choke 3217-38 ft, made considerable salt water and deepened to 3770 ft. **Means of Discovery:** Wells drilled for water as early as 1902 showed gas, well on Rosse farm in 1914 blew out, caught fire. **Type Structure:** Domal type structure, may be deep seated salt dome. **Producing Formation, Depth and Gravity:** Miocene and Oligocene, 1400 ft, 1880, 2150 ft gas; 2150, 22.5 gr; 280° gas; 2900, 21 gr; 3225, 22 gr. **Producing Area:** 1800 acres, 240 acres oil. **Extent of Development to Jan. 1, 1937:** 62 wells, 18 oil, 14 gas, 30 failures. During 6 months, 1937: 3 wells, 2 oil, 1 failure. **Deepest Test:** Humble Oil & Refining Co.'s Fiato 4; abnd

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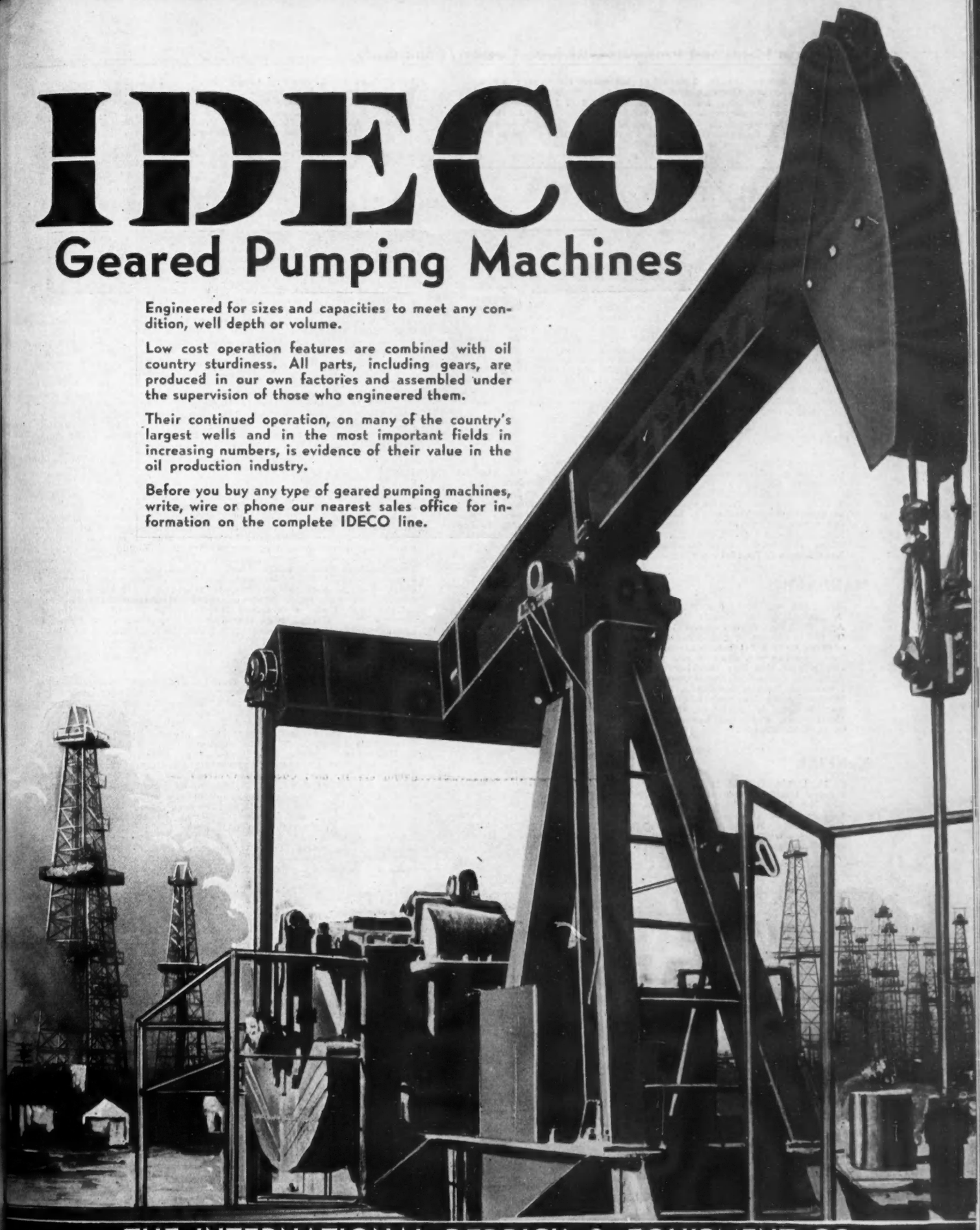

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5814 ft, October, 1929. **Estimated Ultimate Recovery:** 1,000,000 bbls. **Production Through 1936:** 659,964 bbls. **Indicated Remaining Reserve:** 341,036 bbls. **Daily Production July 1, 1937:** 84 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Humble Oil & Refining Co., Fidelity Exploration Co., Clymore Production Co., W. L. Hinds, Great States Oil Corp., Buchanan & Blanco.

LIVE OAK COUNTY

FORT MERRILL

P. Salinas sur, 7 mi se George West. **Discovery Well:** Mills Bennett's Walton & Shipp 1, Aug. 19, 1935, 325 bbls 42 gr oil, ⅛-in choke, 660 lbs tubing, 950 lbs casing pressure; total depth 5425 ft, producing horizon 4699-4700 ft (plugged to 4750 ft and perforated with 50 shots at 4700-4706 ft). **Means of Discovery:** Geological data, trend play. **Type Structure:** Production due to closure against fault. **Producing Formation, Depth and Gravity:** Upper Saline Bayou (Yegua), 4700 ft, 42 gr. **Producing Area:** 30 acres. **Extent of Development to Jan. 1, 1937:** 2 oil wells. During 6 months, 1937: None. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 105,000 bbls. **Production Through 1936:** 25,806 bbls. **Indicated Remaining Reserve:** 79,194 bbls. **Daily Production July 1, 1937:** 11 bbls. **Oil Outlet:** Railroad. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Mills Bennett, Trinity Drillers, Transwestern Oil Corp.

LOBO‡

William Odocharty sur, 1 mi nw Oakville. **Discovery Well:** Live Oak Basin Oil Co.'s Reagan 1, 1920, 2,000,000 cu ft gas, 840 ft. **Means of Discovery:** Surface indications. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth and Gravity:** Top Jackson, 840 ft, gas (Cole). **Producing Area:** 40 acres. **Extent of Development to Jan. 1, 1937:** 10 wells, 2 gas, 8 failures. During 6 months, 1937: None. **Deepest Test:** Lightfoot et al's W. H. Lewis 1, abnd 2575 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** Field abandoned. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Henderson Coquat et al.

MARBACH‡

Block 15, Claunch Ranch, Elizabeth Jurdin surveys, 3 mi sw Witsett. **Discovery Well:** C. L. Witherspoon Sr.'s Marbach 1-A, Apr. 25, 1934; total depth 527 ft, sand 513-27 ft, 4-in csg set 513 ft, 10,500,000 cu ft gas, rock pressure 173 pounds. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lensing structure, dipping se; ne-sw trend. **Producing Formation, Depth and Gravity:** Hockleyensis, 500 ft, gas. **Producing Area:** 40 acres. **Extent of Development to Jan. 1, 1937:** 8 wells, 1 gas, 7 failures. During 6 months, 1937: 2 failures. **Deepest Test:** C. L. Witherspoon's Marbach 2, abnd 1507 ft, July 1, 1934. **Daily Production July 1, 1937:** Gas. **Outlet:** Shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** R. A. David, J. H. Durbin, C. L. Witherspoon.

McNEILL

S. N. Dobie, GH&H RR, M. M. Shipp and Jane Curry surveys, 2 mi w Dinero. **Discovery Well:** Lion Oil Refining Co.'s McNeill 1, Aug. 17, 1934, 360 bbls 44.5 gr oil; total depth 4376 ft, 9⅝-in csg 4368 ft, sand 4370-76 ft, 200 lbs tubing, 350 lbs casing pressure, ¼-in choke. **Means of Discovery:** Geological information. **Type Structure:** Closure against faulting. **Producing Formation, Depth and Gravity:** Hockleyensis, 4375 ft, 44.5 gr; Cockfield (Pettus), 5000 ft, 47 gr. **Producing Area:** 120 acres, 70 acres oil. **Extent of Development to Jan. 1, 1937:** 13 wells, 7 oil, 1 gas, 5 failures. During 6 months, 1937: None. **Deepest Test:** Lion Oil & Refining Co.'s Dick Dobie 1, abnd 6212 ft, Nov. 7, 1935. **Estimated Ultimate Recovery:** 475,000 bbls. **Production Through 1936:** 169,654 bbls. **Indicated Remaining Reserve:** 305,346 bbls. **Daily Production July 1, 1937:** 100 bbls. **Oil Outlet:** Rail, trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Lion Oil & Refining Co., Trinity Drillers, Darby Petroleum Co., Humble Oil & Refining Co., Whittington et al, Magnolia Petroleum Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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MOUNT LUCAS

Includes M. B. Kiolin, G. W. Wright, E. Gonzales, F. Botello, W. J. Cannon, John McMullen, J. Sandman surveys, at town of Lucas. **Discovery Well:** Houston Oil Co.'s Cartwright 1, Jan., 1923, 20,000,000 cu ft gas. **Subsequent Discoveries Since July 1, 1936:** Houston Oil Co.'s C. L. Cartwright 35, Aug. 24, 1936, total depth 5532 ft, plugged back 2510 ft, sand 2505-10 ft, 50 bbls day 23.2 gravity oil, 9-in casing 2276 ft, liner through sand; elev 85 ft; opens new oil producing horizon. **Means of Discovery:** Geological information. **Type Structure:** Sand lenses on large Domal type structure. Some faulting. **Producing Formation:** Gueydan-Catahoula zone gas sands 2000-2500 ft; Frio 3500 ft; Pettus 5200 ft. Oil sands 2500 ft and 3550 ft, 23.5 gravity; 5200 ft, 52.3 gravity. **Producing Area:** 3650 acres, 320 acres oil. **Extent of Development to Jan. 1, 1937:** 67 wells, 13 oil, 38 gas, 16 failures. During 6 months, 1937: 1 failure. **Deepest Test:** Houston Oil Co.'s Cartwright 32, total depth 6787 ft. plugged back 5316 ft, set casing at 5316 ft, perforated 5246-56 ft, 12,000,000 cubic ft gas, June 30, 1935. **Estimated Ultimate Recovery:** 1,160,000 bbls. **Production Through 1936:** 214,370 bbls. **Indicated Remaining Reserve:** 945,630 bbls. **Daily Production July 1, 1937:** 70 bbls. **Oil Outlet:** Houston Oil Co., loading rack. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Houston Oil Co., Marine Oil Corp.

NORTH LUCAS

Jane Curry Survey, at Dinero Townsite. **Discovery Well:** Smith & Story's Frederick 1, Apr. 6, 1935, 440 bbls 44.2 gravity oil, ¼-in choke, 700 lbs tubing, 1200 lbs casing pressure; total depth 5209 ft, producing horizon, 5201-09 ft, elev 104 ft. **Means of Discovery:** Trend play. **Type Structure:** Production due to sand conditions. **Producing Formation, Depth and Gravity:** Yegua 5200 ft, 44.2 gravity. **Producing Area:** 350 acres, 120 in oil. **Extent of Development to Jan. 1, 1937:** 8 wells, 2 oil, 1 gas, 5 failures. During 6 months, 1937: None. **Deepest Test:** The Texas Co.'s Reagan 1, abnd 4500 ft. **Estimated Ultimate Recovery:** 240,000 bbls. **Production Through 1936:** 32,979 bbls. **Indicated Remaining Reserve:** 207,021 bbls. **Daily Production July 1, 1937:** 25 bbls. **Oil Outlet:** Line to Three Rivers. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Houston Oil Co., Tri-Ess Corp., Smith & Story.

OAKVILLE

Louis Romero Survey, 1 mi n Oakville. **Discovery Well:** Simmons Oil & Gas Co.'s Reagan 1, 1928, 1,500,000 cu ft, total depth 300 ft, producing horizon 256-300 ft, 52 lbs rock pressure. **Subsequent Discoveries Since July 1, 1936:** Simmons Oil & Gas Company's Clara McGriff 5, Sept. 7, total depth 2816 ft, Pettus sand 2792-2816 ft, perforated casing 2804-12 ft, flowed 5,000,000 cu ft gas through ¼-in choke, 1300 lbs pressure. Opened new sand. **Means of Discovery:** Surface indications. **Type Structure:** Considerable major faulting. **Producing Formation, Depth and Gravity:** Catahoula, 300 ft, gas; Cockfield (Pettus) 2800 ft, 32 gravity. **Producing Area:** 320 acres, 30 oil. **Extent of Development to Jan. 1, 1937:** 24 wells, 1 oil, 12 gas, 11 failures. During 6 months, 1937: 6 wells, 2 oil, 1 gas, 3 failures. **Deepest Test:** The Texas Co.'s L. A. Reagan 1; abnd 4500 ft. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** 310 bbls. **Indicated Remaining Reserve:** 116,690 bbls. **Daily Production July 1, 1937:** 120 bbls. **Oil Outlet:** Gas line to Three Rivers, oil by trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Simmons Oil & Gas Co., Dirks Bros., Ohio Fuel Supply Co.

PICKETT‡

T. B. Sparks, J. J. Sparks surveys, 4 mi sw Whitsett. **Discovery Well:** Geo. B. Pickett's Nelson 2, 1926, 500,000 cu ft gas, 438 ft. **Means of Discovery:** Trend drilling. **Type Structure:** Small subsurface high with local sand lenses. **Producing Formation, Depth and Gravity:** Gas in lower Cole sand; Jackson, 430 ft. **Producing Area:** 140 acres. **Extent of Development to Jan. 1, 1937:** 15 wells, 6 gas, 9 failures. During 6 months, 1937: None. **Deepest Test:** Loma Oil Co.'s Brewer 1, abnd 1306 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Loma Oil Co.

SIMMONS*

Centering Sections 41, 42, 43, and 44, Simmons subdivision 2 mi sw Simmons City. **Means of Discovery:** Surface structure. **Extent of Development:** About 14 shallows wells have been drilled, developing 9 small gassers at about 600 ft in the Cole (Fayette) section of the Jackson. Lightfoot et al's Thomas 1 was deepest hole, abnd 2475 ft. All gas wells abnd.

THREE RIVERS‡

B. Haughy, Thomas Henry, R. Everett surveys, 1 mi nw Three Rivers. **Discovery Well:** Glasco & Falin's Tips 1, 1926, 662 ft, blew out while drilling, made about 10,000,000 cu ft gas. **Means of Discovery:** Trend drilling. **Type Structure:** Sand lensing, some faulting. **Producing Formation, Depth and Gravity:** Upper Jackson, 660 ft and 825 ft, both gas. **Producing Area:** 250 acres. **Extent of Development to Jan. 1, 1937:** 12 wells, 5 gas, 7 failures. During 6 months, 1937: None. **Deepest Test:** Henderson Coquat Charles H. Wedding 1; abnd 2410 ft. **Daily Production July 1, 1937:** Gas; shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Henderson Coquat, Adolph Dovre, G. G. Mortimer, and others.

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MAVERICK COUNTY

CHITTIM‡

Section 115, 116, 15 mi ne Eagle Pass. **Discovery Well:** Rycade Oil Corp.'s Chittim, 1, 1929, 28,000,000 cu ft gas spraying 40 bbls high gravity oil, 2000 lbs pressure; total depth 5640 ft, producing horizon 5520-80 ft, elev 831 ft. **Means of Discovery:** Surface geology. **Type Structure:** Anticlinal structure. **Producing Formation, Depth and Gravity:** Glenrose, 5650 ft, gas. **Producing Area:** 160 acres. **Extent of Development to Jan 1, 1937:** 17 wells completed, 4 gas, 13 failures. During 6 months, 1937: no wells completed. **Deepest Test:** Rycade Oil Corp.'s Chittim 2, abnd 7635 ft, in Trinity. **Daily Production July 1, 1937:** Gas. **Outlet:** Texas Gas Utilities Company line. Small gasoline plant in field. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Rycade Oil Corp. Wellington Oil Co. has control of all but immediate field. **Remarks:** Rycade's Chittim 3, flowed about 150 bbls 44 gr oil at 3205 ft in Buda and deepened to regular pay in 1929. Only well tested at his level. Recently this well started flowing from between producing and intermediate string of casing.

McMULLEN COUNTY

BYRNE PASTURE*

George Pittuck sur, 3 mi w Calliham. **Means of Discovery:** Geological information, trend play. **Extent of Development:** About 6 shallow wells have been drilled in area. John F. Camp Drilling Co.'s C. M. Byrne Estate 3 blew out Apr. 20, 1936, at 500 ft, but was killed and deepened to 995 ft and abnd. Several other wells in area have had oil showings. Byrne Estate 2 blew out at 304 ft, and was killed and abnd. No. 4 was drilled to 1008 ft and abandoned. All three operations were in 1936.

CALLIHAM

James Pittuck, Roderick O'Boyle, Michael Hely, E. B. W. Scrugham, James Garner surveys, 1 mi n Calliham. **Discovery Well:** Grubstake Inv. Co.'s Brown 1, Nov. 16, 1918, 40,000,000 cu ft gas, 876 ft, producing horizon 848-76 ft, 5-3/16-in csg 797 ft. **Means of Discovery:** Geological information, oil seeps. **Type Structure:** Sand lensing with se dip. **Producing Formation, Depth and Gravity:** Mirando sand in Hockleyensis, 875 ft, 20 gr, Pettus sand in Cockfield, 1050 ft, 20.6 gr. **Producing area:** 770 acres, 370 acres oil. **Extent of Development to Jan. 1, 1937:** 147 wells, 77 oil, 26 gas, 44 failures. During 6 months, 1937: 9 wells, 6 oil, 3 failures. **Deepest Test:** Houston Gulf Gas Co.'s John Stitts 2, abnd 3000 ft. **Estimated Ultimate Recovery:** 1,000,000 bbls. **Production Through 1936:** 572,226 bbls. **Indicated Remaining Reserves:** 427,774 bbls. **Daily Production July 1, 1937:** 265 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** South Texas Oil Co., Grubstake Investment Co., Lightfoot et al, San Balt Petroleum Co., W. M. Stephenson, Charles Wuest, Jr., Benson et al, Conservative Oil Co., Comet Oil Co.

CROWTHER

Centering around the J. Freal sur in ne portion of county, in and around town of Crowther. **Means of Discovery:** Oil in water wells. **Type Structure:** Sand lensing on general high. **Producing Formation, Depth and Gravity:** Jackson, 500 ft, 13 gr. **Producing Area:** 80 acres. **Extent of Development to Jan. 1, 1937:** 37 wells, 22 oil, 15 failures. During 6 months, 1937: 1 oil well. Development over a period from about 1915-1920, developing small production of 18 gr oil at 500 ft in top Diboll. They recovered in the neighborhood of 25,000 bbls of oil, which contained excellent lubricating qualities and now the pool is abnd. Casing has been pulled in all of the wells. Information is doubtful due to the inadequate manner and earliness of development. Recently one well was completed for 5 bbls daily in this sand and is now producing. **Estimated Ultimate Recovery:** 35,000 bbls. **Production Through 1936:** 25,000 bbls. **Indicated Remaining Reserves:** 10,000 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlets:** Trucks. **Rigs Running July 1, 1937:** None.

EZZELL RANCH

Sections 20 and 23, Ezzell Ranch Subd, 5 mi sw Simmons City. **Discovery Well:** Edwin M. Jones' Harry Ezzell 4, June 2, 1937, 186 bbls 19.7 gr oil ¼-in choke, tubing pressure 90 lbs, casing pressure 420 lbs, sand 1523-33 ft, 7-in on bottom 1534 ft, perforate 1523-33 ft with 30 shots. **Means of Discovery:** Geological information, magnetometer survey. **Type Structure:** Not defined, but likely large sand lens on fold. **Producing Formation, Depth and Gravity:** Loma Novia sand in Hockleyensis zone of Jackson age, 1525 ft, 19.7 gr. **Producing Area:** 20 acres. **Extent of Development:** During 6 months 1937, 2 oil wells. **Deepest Test:** Edwin M. Jones' Harry Ezzell 7, drilled to 2385 ft, plugged back for completion in upper sand, 1937. **Estimated Ultimate Recovery:** 180,000 bbls. **Production Through 1936:** New field. **Daily Production July 1, 1937:** 200 bbls. **Oil Outlet:** Trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Edwin M. Jones, Harry Ezzell, Pure Oil Co., Henderson Coquat, George Viteri. **Remarks:** This field is too new to definitely determine importance, but gives rise to considerable development of Loma Novia sand up trend from the present work in Duval County. Pool may cover fairly large area and be big reserve.

*Prospect. †Salt dome, no production. ‡Gas field.

JACOB

John Fadden, J. O'Boyle, M. Pittuck, W. H. Jacobs surveys, Nos. 7, 5, 8, 10, L. Jacob Survey No. 615, William D. Benham Survey No. 8, E. W. B. Scrugham Survey, 2 mi n Calliham. **Discovery Well:** Southern Natural gas Co.'s L. Jacob 1, 1926, 10,000,000 cu ft gas, total depth 788 ft, sd 780-88 ft, elev 288 ft. **Means of Discovery:** Geological information, oil discovered as result of subsurface correlations on abandoned tests and shallow gassers. **Type Structure:** Sand lens on large regional structure (Crowther Monocline). **Producing Formation, Depth and Gravity:** Mirando sd, Jackson age, 780 ft, gas; Pettus sd, Cockfield, 950 ft, 20.5 gr. **Producing Area:** 1400 acres. **Extent of Development to Jan. 1, 1937:** 131 wells, 95 oil, 4 gas, 32 failures. During 6 months, 1937: 9 wells, 4 oil, 5 failures. **Deepest Test:** Loma Oil Co.'s L. Jacob Corp. 44-A, W. H. Jacob Survey No. 10, abnd in Mount Selman which was topped at 2600 ft in 1936. Total depth 3171 ft. Top Cook Mountain 1700 ft, Yegua 900-1700 ft. **Estimated Ultimate Recovery:** 3,040,000 bbls. **Production Through 1936:** 779,910 bbls. **Indicated Remaining Reserve:** 2,260,090 bbls. **Daily Production July 1, 1937:** 615 bbls. **Oil Outlet:** Cardinal Pipe Line Co. 4-in line to loading racks at Whitsett. Some shipped by trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Loma Oil Co., W. H. Kennon, Light Stephenson, Lightfoot et al, Thelma Oil Co., Jane Oil Co., Longhorn Oil Co., Texas Inland Oil Co., Otto Beauchamp, Stewart Oil & Gas Co., National Oil Co.

LOMA ALTA

Sec 13, M. L. Dean survey, near Loma Alta. **Discovery Well:** Texio Oil Co. et al's Atkinson 1, May 29, 1935, 250 bbls 21 gr oil, ⅛-in choke, 50 lbs tubing, 235 lbs casing pressure: total depth 2207 ft, producing horizon 2195-2207 ft, elev 700 ft. **Means of Discovery:** Subsurface geology. **Type Structure:** Sand lensing and faulting control production. **Producing Formation, Depth and Gravity:** Chernosky sand (Hockleyensis), 2200 ft, 21 gr. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 7 wells, 2 oil, 5 failures. During 6 months 1937: None. **Deepest Test:** V. G. Schimmel and Loma Oil Co.'s R. Hagist 1, abnd 2766 ft, May 25, 1936. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** 41,153 bbls. **Indicated Remaining Reserve:** 78,847 bbls. **Daily Production July 1, 1937:** 65 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Humble Oil & Refining Co., Texio Oil Co., Darby Petroleum Co., Illinois Petroleum Co.

LOWE RANCH*

Near central portion of Lowe Ranch, 6 mi sw Tilden. **Means of Discovery:** Geological information, oil shows in water well. **Extent of Development:** More than 20 wells have been drilled, several developing very small production in the Mirando sand around 400 ft. Oil contains ichthyol. Several wells have been drilled to around 1500 ft and Magnolia Petroleum Co.'s Kincaid 1, 2 mi se was drilled to 4670 ft. There is some evidence of faulting of normal dip, but production is mainly as a result of sand lensing. Several wells drilled during past year in general area have failed to develop oil production.

NORTH JACOB

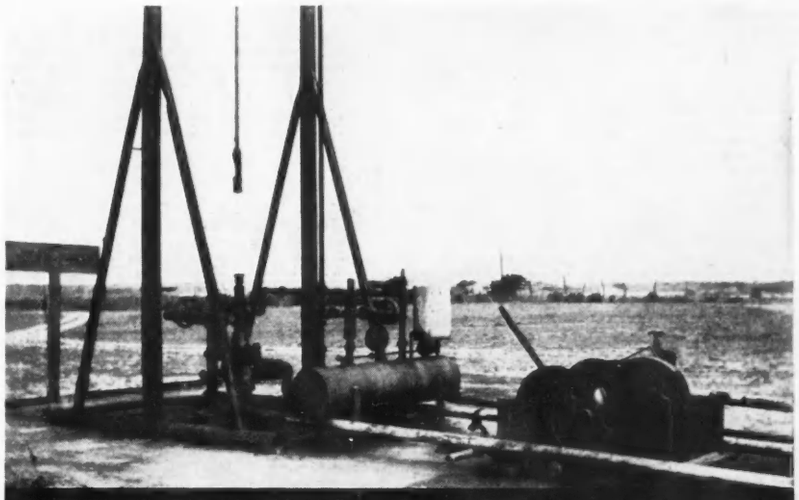
Centering around GH&H Survey No. 15, Sparks and Hays surveys, 5 mi w Whitsett. **Discovery Well:** Loma Oil Co.'s J. Griffith 1, March 20, 1933, 8 bbls 20 gr oil per day, 939 ft, producing horizon 920-27 ft, elevation 287 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lensing on local structure. **Producing Formation, Depth and Gravity:** Pettus (Cockfield), 925 ft, 20 gr. **Producing Area:** 70 acres. **Extent of Development to Jan. 1, 1937:** 19 wells, 3 oil, 16 failures. During 6 months, 1937: 8 wells, 4 oil, 4 failures. **Deepest Test:** Loma Oil Co.'s Dickenson 1, abnd 1770 ft. **Estimated Ultimate Recovery:** Included in Jacob. **Production Through 1936:** Included in Jacob. **Indicated Remaining Reserve:** Included in Jacob. **Daily Production July 1, 1937:** Included in Jacob. **Oil Outlet:** Cardinal Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Loma Oil Co., L. D. Ormsby, F. D. Salter et al.

RHODE‡

Sections 78 and 86, se portion of county. **Discovery Well:** Magnolia Petroleum Co.'s Kincaid 2, May 1, 1936, 20,000,000 cu ft gas, open tubing 90 lbs, casing pressure 620 lbs; total depth 3153 ft, producing horizon 1810-22 ft, elev 545 ft, plugged back to 1810 ft and redrilled to 1822 ft, showed shut-in pressure 650 lbs. **Means of Discovery:** Geological information. **Type Structure:** Sand lens apparent faulting to west. **Producing Formation, Depth and Gravity:** Cole of Upper Jackson, 1820 ft, gas. **Producing Area:** 640 acres. **Extent of Development to Jan. 1, 1937:** 7 wells, 3 gas, 4 failures. During 6 months, 1937: 2 gas wells. **Deepest Test:** Magnolia Petroleum Co.'s Minnie Kincaid 1, abnd 3356 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Magnolia Petroleum Co., Sun Oil Co., Al Buchanan, Rowan & Hope, Barbara Oil Co., Whisenant & Trenchard, Humble Oil & Refining Co., Feimont Oil Co., Texio Oil Co., Rowan & Nichols.

SOUTH CALLIHAM

F. Faddin, M. Hely surveys, 2½ mi s Calliham. **Discovery Well:** W. B. Howard et al's B. Clauch 1-A, Nov. 19, 1934, 10,000,000 cu ft gas, 730 ft. **Subsequent Discoveries Since July 1, 1936:** Jones' Ezzell 3, see deepest test. L. J. Snyder et al, B. C. Clauch 1 and Danvers & Harrison 1, block 3, Clauch subd, Hely survey, 1/3-mi w gas production, completed May 4, 1937, at 1058 ft for 75 bbls oil daily and 5 percent water on pump in sand 1052-58 ft, 4-in casing 1052 ft. Established oil production in heretofore gas area. **Means of Discovery:** Surface and subsurface information. **Type Structure:** Some lensing and faulting. **Producing Formation, Depth and Gravity:** Upper Jackson, 750 ft, gas; Hockleyensis (Government Wells) 1050-1150 ft, gas and



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21 gr; Loma Novia, 1250 ft, gas. **Producing Area:** 720 acres, 20 acres oil. **Extent of Development to Jan. 1, 1937:** 16 wells, 8 gas, 8 failures. During 6 months, 1937: 6 wells, 2 oil, 1 gas, 3 failures. **Deepest Test:** Edwin M. Jones' Harry Ezzell 3, sec 3, Ezzell Ranch subd, Adams sur, drilled to 5301 ft, plugged back and completed at 1230-36 ft for 10,000,000 cu ft gas, May 24, 1937. **Estimated Ultimate Recovery:** 80,000 bbls. **Indicated Remaining Reserve:** 80,000 bbls. **Daily Production July 1, 1937:** 50 bbls. **Oil Outlet:** By trucks; gas, United Gas System. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Carpenter et al, Southwest Oil Co., Howeth & Swiger, B. Masterson, L. J. Snyder, Danvers & Harrison, Edwin M. Jones, Henderson Coquat, Harry Ezzell et al.

WENTZ‡

Southwest of townsite of Wentz, e central part of county, centering Sections 59, 63, 64, 65, 66 and 72. **Discovery Well:** V. G. Schimmell et al's F. A. Hale 1, Feb. 3, 1932, 4,000,000 cu ft gas, 200 lbs rock pressure; total depth 382 ft, producing horizon 370-82 ft, elev 200 ft, 6⅝-in csg 366 ft. **Means of Discovery:** Geological information, surface work. **Type Structure:** On large surface nose reflecting from small subsurface nose. **Producing Formation, Depth and Gravity:** Cole sand, Jackson age, 380 ft, gas. **Producing Area:** 125 acres. **Extent of Development to Jan 1, 1937:** 11 wells, 3 gas, 8 failures. During 6 months, 1937: None. **Deepest Test:** V. G. Schimmell's Two Rivers Ranch 1, abnd 1654 ft; gas sand 773-85 ft; blew out, ran wild, but controlled and drilled deeper, second well set casing at this sand but also blew out and was lost. **Daily Production July 1, 1937:** Gas. **Outlet:** None. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** V. G. Schimmell, Darby Petroleum Co., George W. McMurry, Edwards & Zoch.

MEDINA COUNTY

ADAMS‡

Edwin C. Darst, Joseph Hillemeyer, Charles Decker, Jacob Haff and A. Arby surveys, 12 mi se Hondo. **Discovery Well:** Henderson-Holden Oil Corp.'s Adams 1, April 16, 1926, 8 million cu ft gas, 380 lbs rock pressure, total depth 907 ft, producing horizon 903-907 ft. **Means of Discovery:** Geological information, surface indications. **Type Structure:** Sandy shale body, backed up against some faulting. **Producing Formation:** Navarro-Taylor, 900 ft, gas. **Producing Area:** 1650 acres. **Extent of Development:** To Jan. 1, 1937, 58 wells, 46 gas, 12 failures. During 6 months, 1937: None. **Deepest Test:** Edwards lime test abnd 2289 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Principal Leaseholders:** Field controlled and operated by United Gas System.

CHICON LAKE

M. W. Hewitt No. 39 and B. S. Reid No. 19 Surveys, 5 mi n Natalia, 1 mi sw Pearson. **Discovery Well:** Pearson Oil Co.'s San Antonio Irrigated Farms 1, June 12, 1929, 2,000,000 cu ft gas, 350 lbs rock pressure, total depth 1071 ft, producing horizon 780-820 ft, elev 738 ft, total depth in serpentine, plugged back to 850 ft, set 6⅝-in casing 780 ft, gas sand 530 ft, top serpentine 938 ft. **Means of Discovery:** Geological data. **Type Structure:** Structure doming over serpentine plug. **Producing Formation, Depth and Gravity:** Navarro-Taylor series, 250 ft, 19 gravity; 480 ft, gas; 900 ft, 33.7 gravity (latter includes serpentine). **Producing Area:** 750 acres, 250 acres oil. **Extent of Development:** To Jan. 1, 1937, 44 wells, 26 oil, 6 gas, 12 failures. During 6 months, 1937: 2 oil wells. **Deepest Test:** Thomas & Tarver's Mongold 1, abnd 1700 ft; top serpentine 930 ft, top Edwards lime 1640 ft. **Estimated Ultimate Recovery:** 75,000 bbls. **Production Through 1936:** 21,190 bbls. **Indicated Remaining Reserve:** 53,810 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlet:** Trucks **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Charles H. Wagener, Estate of W. L. Umburn, F. H. Eckert and others, J. E. Whiteside.

*Prospect. †Salt dome, no production. ‡Gas field.

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DEVINE*

Centering around Survey No. 33½, G. Petty grant, 4 mi se Devine. **Means of Discovery:** Geological information, both surface and subsurface. **Extent of Development:** W. C. Campbell et al (was Falvey & Hill), McNenemy 1, abnd May 24, 1936. Well was drilled to 2892 ft, plugged back to 2190 ft and attempted to complete in sand and sandy shale section from 1918-2190 ft. Well flowed a little oil, was put on pump, but could not overcome mud.

INA

P. E. Darst, J. G. Durst, J. F. Brassier surveys, 9 mi se Hondo. **Discovery Well:** Ina Oil Co.'s Schmidt 1, Nov. 10, 1923, 20 bbls 19 gravity oil per day, 844 ft, elev 721 ft. **Means of Discovery:** Geological information, surface faulting. **Type Structure:** Faulting with lensing. **Producing Formation, Depth and Gravity:** Escendido sand, 800 ft, 19 gravity. **Producing Area:** 320 acres. **Extent of Development:** To Jan. 1, 1937, 48 wells, 31 oil, 17 failures. During 6 months, 1937: 2 oil wells. **Deepest Test:** Witherspoon Oil Co.'s L. J. Schmidt 1, abnd 2270 ft in Edwards lime, top 2150 ft, Aug. 25, 1927. **Estimated Ultimate Recovery:** 420,000 bbls. **Production Through 1936:** 147,231 bbls. **Indicated Remaining Reserve:** 272,769 bbls. **Daily Production July 1, 1937:** 12 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Aztec Petroleum Co., R. S. Bynum, Jr., R. S. Lynd, Ina Oil Co.

TAYLOR

A. Bruchet and H. Castro surveys, 5 mi sw Hondo. **Discovery Well:** Medina Oil Co.'s R. T. Taylor 1, Feb. 2, 1936, 100 bbls 16 gravity oil and 150 bbls water per day, 356 ft; later deepened to 1243 ft and abnd. **Means of Discovery:** Geological information. **Type Structure:** Crevice and faulting. **Producing Formation, Depth and Gravity:** Navarro-Taylor, 350 ft, 16 gravity. **Producing Area:** 40 acres. **Extent of Development to Jan. 1, 1937:** 22 wells, 6 oil, 16 failures. During 6 months, 1937: 5 wells, 1 oil, 4 failures. **Deepest Test:** R. P. Whitfield's W. B. Odem 1, Henry Castro Survey No. 177, northeast of Taylor field, elev 820 ft, abnd 1434 ft, March, 1937; Edwards lime topped at 1370 ft showed sulphur water. **Estimated Ultimate Recovery:** 320,000 bbls. **Production Through 1936:** 291,196 bbls. **Indicated Remaining Reserve:** 28,804 bbls. **Daily Production July 1, 1937:** 13 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Ca-ra-co Oil Co., Albert Chmel, R. C. Hill, G. Whitting et al.

MILAM COUNTY

MINERVA-ROCKDALE

J. A. DePena, W. Allen, S. P. Carson, C. S. Robertson, Jose Lease and other surveys, centering around Rockdale. **Discovery Well:** Oklahoma-Bell Oil Co.'s Isaacs 1, Feb. 17, 1921, 20 bbls 37.6 gr oil, 950 ft, elev 450 ft. **Means of Discovery:** Geological information. **Type Structure:** Production from shale and sand lenses, varying up to 1100 ft in thickness, some faulting. **Producing Formation, Depth and Gravity:** Navarro-Taylor, 950-1650 ft, 37.6 gr. **Producing Area:** 4250 acres. **Extent of Development to Jan. 1, 1937:** 666 wells, 617 oil, 4 gas, 45 failures. During 6 months, 1937: None. **Deepest Test:** Texas Petroleum Dev. Co.'s Milton Phillips 1, abnd 3711 ft. **Estimated Ultimate Recovery:** 4,250,000 bbls. **Production Through 1936:** 3,289,429 bbls. **Indicated Remaining Reserve:** 960,571 bbls. **Daily Production July 1, 1937:** 190 bbls. **Oil Outlet:** Minerva Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Bartlett Production Co., Brady Brothers Bynum & Palmer, Central Oil Co., Clear Lake Oil Co., Erie Investment Ltd., Ernest Oil Co., Glass Brothers, Hefley McIntosh & Thomas, W. A. Jones, Lanning & Coffield, Minerva Refining Co., Noack & Lamming, Roundtree & Candle, Wahpoo Oil Co.

WHITE‡

Levi Taylor survey, north end of county. **Discovery Well:** Milam Oil & Gas Co.'s White 1, Oct. 15, 1929, 750,000 cu ft gas per day, 1366 ft; producing horizon 1356-66 ft. **Means of Discovery:** Geological data. **Type Structure:** Some faulting. **Producing Formation, Depth and Gravity:** Taylor Marl, 1350 ft, 16 gr. **Producing Area:** 40 acres, 10 acres oil. **Extent of Development to Jan. 1, 1937:** 15 wells, 1 oil well, 8 gas wells, 6 failures. During 6 months 1937; none. **Deepest Test:** Wilson, Broach & Co.'s R. White 1, abnd 3154 ft. in Glen Rose, July 28, 1931. **Daily Production July 1, 1937:** Only gas. **Oil Outlet:** Small amount oil by trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Milam Oil and Gas Company, Service Oil & Gas Co., Kindorr Developing Co.

NUECES COUNTY

AGUA DULCE

Andres F. de la Fuente, Antonio Longorio, Puenticitas and adjoining grants. 1½ mi se Agua Dulce. **Discovery Well:** Grimm & Yackey and Houston Oil Co.'s Anderson 1, Dec. 31, 1928, 30,000,000 cu ft gas, 2025 ft, elev 12½ ft. **Means of Discovery:** Geological data, based mainly on correlations of shallow water wells, some surface work. **Type Structure:** Elongated dome with approximately 80 ft of closure, pitches to the west, indicating fault on that side of dome. **Producing Formation, Depth and Gravity:** Catahoula, 2000 to 2400 ft, gas; Frio, 4900 ft, 60 gr, with high gas/oil ratio. **Producing Area:** 8000 acres, 600 acres oil. **Extent of Development to Jan. 1, 1937:** 51 wells, 19 oil, 24 gas, 8 fail-

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LOS ANGELES **HOUSTON**

ures. During 6 months, 1937: 2 wells, 1 oil, 1 failure. **Deepest Test:** United Production Corp.'s W. H. Harvey 1, Garcia sur, ½ mi sw production, abnd 9002 ft, July 1, 1937; elev 113 ft, derrick floor; Vicksburg sand 7336-96 ft showed oil and gas. Unable to complete due to mechanical difficulties. **Estimated Ultimate Recovery:** 3,600,000 bbls. **Production Through 1936:** 229,859 bbls. **Indicated Remaining Reserve:** 3,370,141 bbls. **Daily Production July July 1, 1937:** 120 bbls. **Outlet:** United Gas System, gasoline plants in field, loading racks. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** United Production Co., Houston Oil Co., Texon Oil & Royalty Co., Parker, Foran and Knode, Southern Minerals Corp., L. M. Lockhart, Walker et al.

BALDWIN

B. S. & F. 165, J. H. Smith, Wm. Coty, J. S. McGregor surveys, 2½ mi sw Clarkwood. **Discovery Well:** Magnolia Petroleum Co.'s J. C. Baldwin 1, July 9, 1935, 432 bbls, ¼-in choke, 25.8 gr, total depth 3879 ft, producing horizon 3874-79 ft, elev 58 ft derrick floor, later put on pump and made 802⅓ bbls per day. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing, apparently some faulting. **Producing Formation, Depth and Gravity:** Oakville, 3250 ft, gas; Catahoula, 3880 ft, 25.8 gr, 4050 ft, 24.8 gr. **Producing Area:** 280 acres, 240 acres oil. **Extent of Development to Jan. 1, 1937:** 13 wells, 7 oil, 1 gas, 5 failures. During 6 months, 1937: 1 failure. **Deepest Test:** Magnolia Petroleum Co.'s Baldwin 2 abnd 6610 ft. **Estimated Ultimate Recovery:** 1,920,000 bbls. **Production Through 1936:** 331,058 bbls. **Indicated Remaining Reserve:** 1,589,942 bbls. **Daily Production July 1, 1937:** 416 bbls. **Oil Outlet:** Texas Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Gilcrease Oil Co., Magnolia Petroleum Co., Violet Oil Co.

CHAPMAN

Centering around Sec 38, Laureles Farm Tracts, Ramon de Ynojisa Grant, 3 mi sw of London. **Discovery Well:** I. J. Allen and Seaboard Oil Corp.'s J. O. Chapman et al 2, March 18, 1937, 125 bbls 42 gr oil per day ½-in choke, tubing pressure 625 lbs, casing pressure 675 lbs, sand 6464-84 ft, sandy shale 6484-6524, sand 6524-32 ft, drilled to 6717 ft, set casing 6588 ft and perforated 6460-67 ft. **Means of Discovery:** Geophysical prospect. Some work done on correlating wells in general area. **Subsequent Discoveries Since July 1, 1936:** I. J. Allen & Seaboard Oil Corp.'s J. O. Chapman et al 3, April 9, 1937, 89.5 bbls 41.8 gr oil 5 hours ¼-in choke, tubing pressure 550 lbs, casing pressure 700 lbs, sand 5046-58 ft, 7 in, 5048 ft. **Type Structure:** Probably sand lens on regional structural feature. Subsequent development indicates lens rather small. **Producing Formation, Depth and Gravity:** Catahoula, 5050 ft, 41.8 gr; Frio, 6500 ft, 42 gr. **Producing Area:** 40 acres. **Extent of Development During 6 Months, 1937:** 6 wells, 2 oil, 4 failures. **Deepest Test:** I. J. Allen and Seaboard Corp.'s J. O. Chapman et al 1-B, abnd April 29, 1937, 7012 ft. **Estimated Ultimate Recovery:** 400,000 bbls. **Production Through 1936:** New field. **Daily Production July 1, 1937:** 180 bbls. **Oil Outlet:** The Texas Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholder:** Seaboard Oil Corp.

CLARA DRISCOLL

Centering around William Gamble Sur, 1¾ mi ne Driscoll. **Discovery Well:** Santa Clara Oil Co.'s Clara Driscoll Sevier 1, Nov. 20, 1935, 1968 bbls 25.3 gravity oil, 400 lbs tubing, 500 lbs casing pressure, total depth 3816 ft, producing horizon 3807-16 ft, 7-in casing set 3808 ft. **Subsequent Discoveries Since July 1, 1937:** O. W. Killam's Betty Ellick 2, Aug. 5, 1936, total depth 3922 ft, sand 3881-3908 ft, perforated 3887-95 ft, 10,000,000 cu ft gas through ¼-in choke, tubing pressure 1475 lbs, casing pressure 1625 lbs, opened new sand, which produced oil in subsequent wells. Wellington and Pan American (was Santa Clara Oil Co.) Sevier 1-A, 125 acre lease, William Gamble survey, ½ mi se discovery well. Total depth 6075 ft, set 4¾ in 6075 ft, plug back to 5865 ft, perforated 5348-61 ft, 25 bbls distillate 24 hours and large volume gas; tubing pressure 2150 lbs, casing pressure 2250 lbs, Feb. 22, 1937. Frio sand, ¼ in choke. Wellington Oil Co.'s Sevier 14, 254.7 acre lease in William Gamble survey, April 6, 1937; total depth 5433 ft, sand 5425½-33 ft, 78 bbls 3/16-in choke, casing pressure 1700 lbs, tubing pressure 1300 lbs, 31 gr oil. Opened new deep sand. **Means of Discovery:** Geological survey, subsurface information. **Type Structure:** Sand lens on Domal type structure. **Producing Formation, Depth and Gravity:** Catahoula, 3250 ft, gas; 3800 ft, 23.4 gr; 3900 ft, 27.8 gr; Frio 5350 ft, distillate; 5425 ft, 31 gr. **Producing Area:** 480 acres, 220 acres oil. **Extent of Development to Jan. 1, 1937:** 13 wells, 8 oil, 3 gas, 2 failures. During 6 months, 1937: 13 wells, 8 oil, 1 gas, 4 failures. **Deepest Test:** Al Buchanan and Blanco Oil Co.'s Francis Gandy 1, 124.18 acre tr, section 56, Paul subdivision, Driscoll Ranch, 1¼ mi n field; abnd 7308 ft, Feb. 16, 1937; topped Heterostegina 4040 ft, Frio 4130 ft. **Estimated Ultimate Recovery:** 2,000,000 bbls. **Production Through 1936:** 88,802 bbls. **Indicated Remaining Reserve:** 1,911,298 bbls. **Daily Production July 1, 1937:** 790 bbls. **Oil Outlet:** Driscoll Pipe Line Co. to Crude Oil System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Magnolia Petroleum Co., Mid-Continent Petroleum Corp., Ohio Oil Co., O. W. Killam, The Texas Company, Pan American Producing Corp., H. M. Reed, Wellington Oil Co., Williams Hinds, Houston Oil Co., Marathon Oil Co., Stanolind Oil & Gas Co.

FLOUR BLUFF

Flour Bluff Encinal Garden Subdivision, 11½ mi sw Corpus Christi. **Discovery Well:** M. F. Hurlburt et al's J. O. Phillip 1, July 8, 1936, 213 bbls, 43.3 gravity oil, 5/32-in choke, 900 lbs tubing, 1160 lbs casing pressure, total depth 7503 ft, producing horizon 6633-57 ft, plugged back and set casing at 6850 ft, perforated at 6633-43 ft, and 6647-57 ft. **Means of Discovery:** Geophysical survey, geological information obtained from nearby well. **Type Structure:** Anticline. **Producing Formation, Depth and Gravity:** Marginulina, 6650 ft, 43.3 gravity. **Producing Area:** 860

*Prospect. †Salt dome, no production. ‡Gas field.

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acres. **Extent of Development to Jan. 1, 1937:** 16 wells, 15 oil, 1 failure. During 6 months, 1937: 45 oil wells. **Deepest Test:** J. K. Culton's I. M. Singer 1, lot 13, block 39, Flour Bluff & Encinal Garden tracts, 2 mi sw field, abnd July 4, 1937 7010 ft. **Estimated Ultimate Recovery:** 19,000,000 bbls. **Production Through 1936:** 88,930 bbls. **Indicated Remaining Reserve:** 18,911,170 bbls. **Daily Production July 1, 1937:** 4320 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 7. **Principal Leaseholders:** J. K. Culton, Humble Oil & Refining Co., Shell Pet. Co., Barnsdall Oil Co., Flour Bluff Oil Corp., Gem Oil Co., Crown Central Petr. Corp.

LONDON

Centering around Section 25, Laureles Farm Tracts, Ramon de Ynojosa Grant, 12 mi sw Corpus Christi. **Discovery Well:** Wellington Oil Co.'s (Fearis & Cosner), M. L. Stockton 1, Jan. 24, 1937, 52 bbls 25.3 gravity oil 5 hrs, ⅜-in choke, tubing pressure 150 lbs, casing pressure 750 lbs. Drilled to 7005 ft, set 5½-in casing 6227 ft, perforated 4698-4703 ft, elevation 51 ft, derrick floor. **Means of Discovery:** Geological survey. **Subsequent Discoveries:** Gem Oil Co.'s M. L. Stockton 1, flowed 28 bbls distillate and 5,000,000 cu ft gas per day through ¼-in choke, casing pressure 1675 lbs and tubing pressure 1625 lbs. Sand 4752-61 ft. Cosner & Cosner's M. L. Stockton 2, May 18, 1937, 45 bbls distillate and 5,000,000 cu ft gas per day ¼-in choke, tubing pressure 1950 lbs, casing pressure 2050 lbs. Sand 4896-4906 ft. **Type Structure:** Nosing with sand lens. **Producing Formation, Depth and Gravity:** Catahoula, 4700 ft, 25.3 gravity; 4760 ft, distillate; 4900 ft, distillate. Later sand likely at top of Discorbis. **Producing Area:** 30 acres. **Extent of Development During 6 Months, 1937:** 5 wells, 3 oil, 2 failures. **Deepest Test:** Edwin M. Jones' Lucy Cooke 1, abnd 7424 ft, April 1, 1937. **Estimated Ultimate Recovery:** 150,000 bbls. **Production Through 1936:** New Field. **Daily Production July 1, 1937:** 120 bbls. **Oil Outlet:** Texas Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Wellington Oil Company, Ralph E. Fair, Atlantic Refining Co., Cosner & Cosner, Gem Oil Co., Edwin M. Jones.

LUBY

Centering around southeastern portion Tract 4, Block 2, Luby Subdivision, Canutillo Colony Ditch Survey, 20 mi sw Corpus Christi. **Discovery Well:** Seaboard Oil Corp.'s Luby 1, June 26, 1937, 156 bbls, 44.9 gravity oil per day 3/16-in choke, tubing pressure 1500 lbs, casing pressure 1710 lbs, drilled to 5332 ft, set 7-in csg 5175 ft, perforated 5048½-50⅛ ft sand 5028-57 ft, gas/oil ratio 8000 to 1. **Means of Discovery:** Geophysical information, geological data based on nearby tests. **Type Structure:** Local high cut by two faults running east and west. **Producing Formation, Depth and Gravity:** Heterostegina zone, 5050 ft, 44.9 gravity. **Producing Area:** 20 acres. **Extent of Development During 6 Months, 1937:** 1 oil well. **Deepest Test:** Discovery. **Estimated Ultimate Recovery:** 250,000 bbls. **Production Through 1936:** New Field. **Daily Production July 1, 1937:** 100 bbls. **Oil Outlet:** None to July 1—new field. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Seaboard Oil Corp., Stanolind Oil & Gas Co., Sun Oil Co., Wellington Oil Co., The Texas Co., Ohio Oil Co., Humble Oil & Refining Co.

SAXET

Location: Includes sections 421, 582, 416, 406, 403, 404, 405, 409, 410, 411, 415, 401, 407, 402, 315, 316. W. S. McGregor survey, J. Ward survey. Rincon del Oso, J. Frank, E. Villareal, J. Dunn, A. Roberts, H. B. Shepherd and H. L. Kinney Surveys, Sections 591, 312, 689, 211, 5, etc., 5 mi sw Corpus Christi. **Discovery Well:** Saxet Oil Co.'s John Dunn 1, Jan. 18, 1923, 35,000,000 cu ft gas, 2408 ft, sand 2288-2408 ft. **Means of Discovery:** Geological information led to discovery of shallow gas. **Type Structure:** Elongated dome, sand lensing. Considerable faulting through field with production on both sides of fault. **Producing Formation:** Shallow gas from Oakville and oil and gas sands continue into Frio. Individually discussed in accompanying reports on Saxet Deep and Saxet Shallow areas. **Producing Area:** 13,200 acres, 5280 acres oil. **Extent of Development to Jan. 1, 1937:** 427 wells, 342 oil, 37 gas, 48 failures. During 6 months, 1937: 194 wells, 179 oil, 6 gas, 9 failures. **Deepest Test:** H. H. Howell's W. S. Hutchins 4, drilled in 1937 to 7505 ft in Frio. **Estimated Ultimate Recovery:** 71,500,000 bbls. **Production Through 1936:** 8,504,964 bbls. **Indicated Remaining Reserve:** 63,000,000 bbls. **Daily Production July 1, 1937:** 32,425 bbls. **Oil Outlet:** Southern Minerals Corp., Taylor Refining Co., Republic Pipe Line Co., Crude Oil Pipe Line Co., Potter Pipe Line Co., Texas Pipe Line Co., Humble Pipe Line Co., and several other independent gathering systems and local refineries. **Rigs Running July 1, 1937:** 48. **Principal Leaseholders:** Allen & Morris, C. Andrade, Mills Bennett, R. B. Bryant, H. H. Howell, Conservative Oil Co., Crown Central Petroleum Corp., Donico Production Co., Floboots Oil Corp., Lonnie Glasscock, Great States Oil Corp., Violet Oil Corp., W. H. Harrison Drilling Co., Hiawatha Oil & Gas Co., Houston Oil Co., Kepley Prod. Co., Magnolia Petroleum Co., T. P. Morgan, Chapman Minerals Corp., North Star Oil Corp., Pan American Production Corp., Phillips Petroleum Co., Perry & Reed, Potter & Snowden, Reesoto Oil Corp., Renway Oil Corp., Republic Petroleum Corp., Richardson Petroleum Corp., Shell Petroleum Corp., B. F. Smith et al, Southern Minerals Corp., T. N. T. Oil Co., Taylor Refining Co., Texon Co., Tulle Lake Oil Co. **Remarks:** Includes both shallow and deep areas and districts commonly referred to as Buckholts, Clarkwood, Old Saxet, New Saxet, and Saxet deep.

SAXET DEEP

Centering around north, northwest and western portion of Saxet field. **Discovery Well:** A. F. Holliday's J. Griffith 1, July 5, 1935, 25,000 cu ft gas and spraying 35 bbls 38.9 gravity oil per day; ¼-in choke; 1975 lbs equalized pressure; total depth 5602 ft, sand 5598-5602 ft. **Subsequent Discoveries:** W. W. Chapman, Trustee's Morgan Clark 4, Sept. 12, 1936, depth 6400 ft, flowed

*Prospect. †Salt dome, no production. ‡Gas field.

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HOUSTON, OCT. 11-16, 1937

128.32 bbls 58.5 gravity gasoline and considerable gas daily on 7/64-in choke. Tubing pressure 2200 lbs, casing pressure 2400 lbs. Opened new sand. Hiawatha Oil Co.'s J. Griffith 6, 99.79-acre tract in Frank Survey 416, total depth 6802 ft, perforations 6749-59 ft, Jan. 1, 1937, 150 bbls per day ½-in choke, 48 gravity oil, casing pressure 1050 lbs, 7-in casing 6770 ft, sand 6725-59 ft. Opened deep sand in Saxet field. Republic Natural Gas Co.'s J. K. Ordner 3, 100-acre tract, B.S.&F. Survey 403, Feb. 16, 1937, 6912 ft, 32.16 bbls of oil in 6 hours on ⅛-in choke, tubing pressure 2150 lbs, casing pressure 2600 lbs, 40.5 gravity oil, sand 6904-12 ft, 7-in casing 6895 ft. New deep sand of Saxet field. Hiawatha Oil & Gas Co.'s Nellie Griffith 7, 100-ac lease, Survey 416, June 26, 1937, 115.67 bbls 24 hours 5/32-in choke, casing pressure 1900 lbs, tubing pressure 1450 lbs, perforations 5533½-43½ ft, total depth 7230 ft. **Means of Discovery:** Deeper drilling on structural features developed as result of shallower completions. **Type Structure:** Domal Type proposition, cut by faulting. **Producing Formation, Depth and Gravity:** All Frio, 5500 ft, 38.2 gravity; 5600 ft, 38.9 gr; 5770 ft, 58 gravity; 5850 ft, 39.9 gravity; 6300 ft, 58.5 gravity; 6700 ft, 48 gravity; 6900 ft, 40.5 gravity. **Producing Area:** 2760 acres, 2460 acres oil. **Extent of Development to Jan. 1, 1937:** 134 wells, 123 oil, 14 failures. During 6 months 1937: 86 wells, 80 oil, 1 gas, 5 failures. **Estimated Ultimate Recovery:** 41,250,000 bbls. **Daily Production July 1, 1937:** 19,575 bbls. **Rigs Running July 1, 1937:** 26. **Remarks:** This is supplementary to Saxet general coverage. See that report for further details.

SAXET SHALLOW

Centers around south and eastern portion of Saxet field. Shallow gas covers entire Saxet field. **Discovery Well:** Saxet Oil Co.'s John Dunn 1, Jan. 18, 1923, 35,000,000 cu ft gas per day, total depth 2408 ft, sand 2288-2408 ft. **Producing Formation, Depth and Gravity:** Oakville-Catahoula, 1000-2800 ft, series of gas sands (main one at 2280 ft); 3150 ft, 24 gravity; 3900, 4000, 4300, 4400, 4500, 4700, 4800, 24-25 gravity. Series of sand lenses in latter group, plus faulting makes definite determinations of these sands impossible. Deepest sands in Discorbis-Heterostegina zone. **Producing Area:** 13,200 acres, 3840 acres in oil. **Extent of Development to Jan. 1, 1937:** 290 wells, 219 oil, 37 gas, 34 failures. During 6 months, 1937: 110 wells, 99 oil, 5 gas, 6 failures. **Estimated Ultimate Recovery:** 30,250,000 bbls. **Daily Production July 1, 1937:** 12,850 bbls. **Rigs Running July 1, 1937:** 22. **Remarks:** This is supplementary to Saxet general coverage. See that report for further details.

SAXET HEIGHTS (Corpus Christi)

E. Vilareal Survey and residential subdivision extending west from Corpus Christi. **Discovery Well:** J. K. Culton's Baldwin et al 1, Nov. 2, 1935, 2,000,000 cu ft gas, 62 bbls 25 gravity oil, 5/32-in choke, 1350 lbs tubing, 1650 lbs casing pressure; total depth 4082 ft, producing horizon 4076-82 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing on anticlinal or domal type structure. **Producing Formation, Depth and Gravity:** Catahoula, 4100 ft, 25 gravity. **Producing Area:** 1250 acres, 1080 acres oil. **Extent of Development to Jan. 1, 1937:** 222 wells, 207 oil, 3 gas, 12 failures. During 6 months, 1937: 31 wells, 25 oil, 6 failures. **Deepest Test:** Taylor Petroleum Co.'s Corpus Christi Country Club 7, 83.5-acre tract, Villareal grant, abnd 7531 ft, Mar. 21, 1937. **Estimated Ultimate Recovery:** 6,500,000 bbls. **Production Through 1936:** 2,236,557 bbls. **Indicated Remaining Reserve:** 4,263,443 bbls. **Daily Production July 1, 1937:** 8340 bbls. **Oil Outlet:** Potter Pipe Line Co., Texas Pipe Line Co., Corpus Christi Refining Co., Taylor Refining Co., Republic Pipe Line Company, Southern Pipe Line Company, Saxet Pipe Line Company. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** Republic Natural Gas Co., J. K. Culton, W. A. Richardson, et al, Southern Minerals Corp., W. H. Harrison and R. Y. Walker, Conroe Drilling Co., Cox & Reed, Morgan Bros., Pedernal Oil Co., Westgate-Greenland Oil Co., Baltic Drilling Co., W. C. Brady, Chinero Prod. Co., W. B. Hinton, C. F. McGrew, Port Oil & Gas Co., Potter & Snowden, Taylor Refining Co., Sam E. Wilson.

SOUTH AGUA DULCE

Palo Alto and Longoria Grant, 7 mi sw Banquette. **Discovery Well:** Texon Royalty Co.'s M. P. Austin 1, Oct. 6, 1936, total depth 5836 ft, sand 5756-79 ft, 100 bbls, 43 gravity oil through ⅛-in choke, tubing pressure 1600 lbs, casing pressure 2000 lbs. **Means of Discovery:** Geological and geophysical information, on trend with Agua Dulce field and considered to be extension to that field, in the opinion of some. **Type Structure:** Nosing and sand lensing on general anticline. **Producing Formation, Depth and Gravity:** All Frio, 5800 ft, 43 gr; 6400 ft, distillate; 6800 ft, gas and distillate. **Producing Area:** 800 acres, 120 acres oil. **Extent of Development To Jan. 1, 1937:** 4 wells, 1 oil, 1 gas, 2 failures. During 6 months, 1937: 4 wells, 1 oil, 2 gas, 1 failure. **Deepest Test:** Lockhart Bros., Eliff 1, 3054.9 acre tract, Antone Longoria survey, March 3, 1937, 5 bbls distillate per hour through perforations 6410-20 ft, ⅛-in choke, tubing pressure 2300 lbs, total depth 6912 ft. **Estimated Ultimate Recovery:** Included in Agua Dulce. **Oil Outlet:** United Gas System taking gas, loading rack at railroad for oil. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Texon Royalty Company, Conroe Drilling Company, L. M. Lockhart, Texon Royalty Company, Mid-Continent Petroleum Corporation, Lonnie Glasscock, Houston Oil Company, Stanolind Oil and Gas Co., H. S. Moss et al. **Subsequent Discoveries:** Texon Royalty Co.'s Sevier 2, blew out at 6832 ft, Nov. 19, 1936, caught fire, cratered, and still running wild and burning on July 1, 1937. H. S. Moss et al's R. H. Coleman 1, on Feb. 25, 1936, perforated drill pipe which had been stuck at 6884 ft in sand section 6784-88 ft, and flowed large amount of gas. Shut in filled with high gravity oil and built up 800 lbs pressure. Neither well successfully completed, but should be classified as discovery wells of deep sands. Lockhart Bros.' Eliff 1, March 3, 1937, through perforations 6410-20 ft for 5 bbls distillate per hour on ⅛-in choke, tubing pressure 2300 lbs.

*Prospect. †Salt dome, no production. ‡Gas field.

SOUTH CLARA DRISCOLL

Section 125, George H. Pauls Sub, Driscoll Ranch, 2 mi s Driscoll. **Discovery Well:** Wellington Oil Co. and Seaboard Oil Corp.'s M. L. Dugger 1, May 5, 1937, 7 bbls 26 gr oil per hour 3/16-in choke, tubing pressure 450 lbs, casing pressure 1000 lbs, sand 3917-29½ ft. **Means of Discovery:** Geological and geophysical information, in trend with production in Driscoll field. **Type Structure:** Sand lensing along general high, probably shore line proposition. **Producing Formation, Depth and Gravity:** Catahoula, 3925 ft, 26 gr. **Producing Area:** 20 acres. **Extent of Development During 6 Months, 1937:** 1 oil well. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 200,000 bbls. **Production Through 1936:** New field. **Daily Production July 1, 1937:** 100 bbls. **Oil Outlet:** Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Seaboard Oil Corp., Sun Oil Co., Wellington Oil Co. The Texas Co., Mills Bennett, C. C. Shumway, Magnolia Petroleum Co.

STRATTON

Sections 12 and 13, C. E. Stratton subdivision, 8 mi n Kingsville. **Discovery Well:** Stanolind Oil & Gas Co.'s Stratton 1, Dec. 18, 1931, 4,000,000 cu ft wet gas, sandy lime 4788-4801 ft, 5½-in casing set 4770 ft, 550 lbs working pressure on 5/16-in choke, built up pressure of 1850 lbs, closed in, well later deepened to 5002 ft, elev 115 ft. **Subsequent Discoveries Since July 1, 1936:** Camp Production Co.'s C. Phillips Wardner, Tr, 1, Section 12, Stratton Subdivision, elev 106 ft, ground, May 12, 1937, 47 bbls oil in 24 hours, 3/16-in choke, casing pressure 2200 lbs, tubing pressure 2110 lbs, gas/oil ratio, 34,600/1, 49.3 gr through perforations 5992-6002 ft, total depth 6715 ft. **Means of Discovery:** Geophysics. **Type Structure:** Likely domal type structure, sand lensing. **Producing Formation, Depth and Gravity:** Frio, 4800 ft, gas and distillate; 6000 ft, 49.3 gr. **Producing Area:** 400 acres, 20 acres oil. **Extent of Development:** To Jan. 1, 1937: 2 wells, 1 gas, 1 failure. During 6 months, 1937: 1 oil well. **Deepest Test:** Stanolind Oil & Gas Co.'s Stratton 2; abnd 6904 ft, Oct. 12, 1934; had sand 6303-14 ft showing for gasser spraying distillate. **Estimated Ultimate Recovery:** 100,000 bbls. **Production Through 1936:** Gas. **Indicated Remaining Reserve:** 100,000 bbls. **Daily Production July 1, 1937:** 65 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** John Camp Production Co.

REFUGIO COUNTY

BONNIE VIEW*

Centering in Bonnie View Ranch, se of Woodsboro. **Means of Discovery:** Geological and geophysical information and surface indications. **Extent of Development:** A number of deep failures have been drilled in the general district, but none have established production. Holland Oil Co.'s Peck 1, E. Lopez Survey No. 44, abnd in 1934, after showing a small amount of 35.6 gr oil at 5327-51 ft. Mills Bennett's Fred Walzel, E. Lopez Survey found several sands corresponding to those in the Peck well, including one at 5995-6000 ft. All carried shows of oil and gas, but developed salt water on tests, abnd July 19, 1936, 6314 ft. Benedum & Trees Oil Co.'s R. H. Welder 1 at the extreme south end of this block abnd at 7344 ft in 1936; topped thick sand body at 5713 ft and on drill-stem test 5707-19 ft recovered 17 fourbles of oil, mud and salt water with 20 lbs pressure. Well was believed to have had sufficient show to have made a small producer. Another well is being started about midway between the three tests herein referred to.

FOX

Hews & Brown Sur, 3 mi ne Refugio. **Discovery Well:** United Production Co.'s W. J. Fox 1-A, May 14, 1931, 672 bbls 58 gr oil, 5886 ft 5½-in casing 5877 ft, sand 5878-86 ft, tubing 675 lbs, casing 725 lbs, ¼-in chokes. **Means of Discovery:** Geological information, based on subsurface information and surface indications, dip in Lissie, Beaumont contract. **Type Structure:** Domal type structure, sand lenses rather spotted. **Producing Formation, Depth and Gravity:** Heterostegina, 4975 ft, gas; Frio, 5875 ft, 38.5 gr; 6475 ft, 23.5 gr. **Producing Area:** 450 acres, 320 acres oil. **Extent of Development To Jan. 1, 1937:** 14 wells, 11 oil, 1 gas, 2 failures. During 6 months, 1937: 1 failure. **Deepest Test:** United Production Co.'s W. J. Fox 2-A, (see above). **Estimated Ultimate Recovery:** Included in Refugio. **Oil Outlets:** Atlantic Pipe Line Co., Humble Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** United Production Corp., Houston Oil Co., Hewitt & Dougherty.

GRETA

E. H. Winfield, John Peoples, M. S. Ximenes, N. S. Crunk, Hughes & Brown, James T. McGrew and C. A. Hardwick Surs, centering around town of Greta. **Discovery Well:** George E. Smith and O. R. Seagraves' J. M. O'Brien 1, May 27, 1933, 530 bbls 21.6 gr oil, total depth 4403 ft, sand 4376-4403 ft, ¼-in choke, elev 70 ft. **Means of Discovery:** Geological data and trend play, abnormal swing in Lissie gravels into Beaumont clay. **Type Structure:** Domal type structure with several sand lenses. Deep horizon on se flank of structure, 3600-ft sand on extreme s flank, 4400-ft sand general, but broken up with breaks of shale and other materials. Number of shallow gas sands also general. Axis north and south. **Producing Formation, Depth and Gravity:** Oakville-Catahoula, 1730 ft, 2100 ft, 2400 and 2800 ft, (intermediate levels) gas; 3500 ft, 21 gr; Heterostegina, 4400 ft, 21.6 gr; Frio, 5100 ft, gas and distillate; 5600-5700 ft, 61.7 gr; 5800-5900 ft, 38.5 gr; 6250 ft, 35.5 gr. **Producing Area:** 5400 acres, 4420 acres oil. **Extent of Development to Jan. 1, 1937:** 241 wells, 217 oil, 9 gas, 16 failures. During 6 months, 1937: 2 oil wells. **Deepest Test:** Edwin M. Jones' O'Brien 11-a, Dec. 12, 1935, through perfora-

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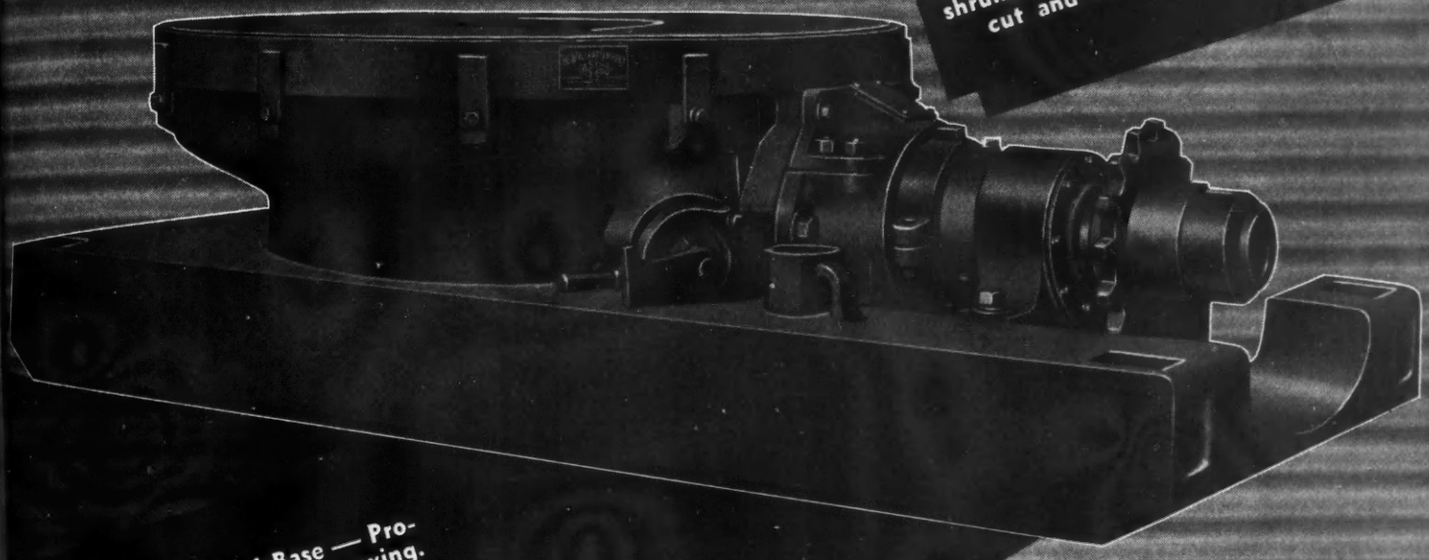

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tions 5090-5160 ft as wet gasser. Had drilled to 7461 ft in Vicksburg. **Estimated Ultimate Recovery:** 75,140,000 bbls. **Production Through 1936:** 15,560,203 bbls. **Indicated Remaining Reserve:** 59,579,897 bbls. **Daily Production July 1, 1937:** 13,300 bbls. **Oil Outlets:** Atlantic Pipe Line Co., Humble Pipe Line Co., Texas Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Humble Oil & Refining Co., Atlantic Ref. Co., Stanolind Oil & Gas Co., Greta Oil Corp., United Production Co., Texas Gulf Producing Co., Blanco Oil Co., Hewitt & Dougherty, Southwest Oil Corp., Edwin M. Jones, Martex Oil Co., Nesral Oil Co., Heyser & Heard, Pat Rutherford, Windsor Oil Co. **Remarks:** Sand at 5800-5900 ft on e flank of field same as Tomoconnor and only older deep wells included as part of Greta report. All new production and development in this horizon part of Tomoconnor—producing areas of two fields actually overlap.

GULF-O'CONNOR*

Southeast corner of 32,404-acre ranch in C E P I & M Sur. No. 254, near Goliad-Victoria County line. **Means of Discovery:** Geological information. **Extent of Development:** Two wells have been drilled. Gulf Production Co.'s O'Conner 2 Sept. 16, 1932, 50,000,000 cu ft gas per day with 2000 lbs rock pressure; total depth 5710 ft, sand 5703-10 ft, elev 89 ft, drilled deeper, abnd 6860 ft Feb. 15, 1933. Other well was a failure. One active well in general area by Randon Oil Co. and American Liberty Oil Co., which made drill-stem test in Vicksburg 5729-68 ft. recovering 2900 ft of salt water with small scum of oil in top fourble and small amount of gas in 20 minutes, the well being J. Vincent 1 in Block 9, Randon Oil Co., Oil and Gas lease subdivision of Vincent Lands, C. E. I. P. & M. Sur No. 41.

O'CONNOR (McFaddin)

John Keating, F. Rios and Power & Hewitson Surs, near Victoria County line. **Discovery Well:** Humble Oil & Refining Co.'s M. V. O'Connor 1, Dec. 1, 1931, 200 bbls 42 gr oil, 4155 ft, sand 4133-55 ft, did not hold up production. **Means of Discovery:** Geological and geophysical information. Faulting evidenced, surface indications. **Type Structure:** Production on upthrow side of large fault with displacement of more than 450 ft. Downthrow side of fault to se. **Producing Formation, Depth and Gravity:** Catahoula, 2240 ft, gas; 3150 ft, 21 gr; Frio, 4150 ft, 42 gr. **Producing Area:** 250 acres, 140 acres oil. **Extent of Development To Jan. 1, 1937:** 21 wells, 14 oil, 5 gas, 2 failures. During 6 months, 1937: None. **Deepest Test:** Humble Oil & Refining Co.'s M. V. O'Connor 3, March 11, 1933, total depth 6860 ft; plugged back 2879 ft, sidetracked and drilled deeper to 3138 ft; sand 3130-38 ft; set 5-in 3125 ft; initial production 203 bbls 21 gr oil daily, ⅝-in choke; tubing pressure 220 lbs, casing pressure 180 lbs. **Estimated Ultimate Recovery:** 1,260,000 bbls. **Production Through 1936:** 341,405 bbls. **Indicated Remaining Reserve:** 918,595 bbls. **Daily Production July 1, 1937:** 230 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholder:** Humble Oil & Refining Co.

REFUGIO

Refugio Town Tract, Thomas Mullin, Manuel Arocha, Isabella Surs, centering around Refugio. **Discovery Well:** Theas Gulf Gas Association's F. V. W. Heard 1, Sept., 1920, 50,000,000 cu ft gas, 1902 ft. **Subsequent Discoveries:** Houston Oil Co.'s F. B. Rooke 32, Mullin Sur, June 30, 1937, 96 bbls 38.1 gr oil daily, ⅛-in choke, tubing pressure 650 lbs, casing pressure 1950 lbs, total depth 6420 ft, sidetracked at 6138 ft, sand 6192-6202 ft. **Means of Discovery:** Geological study, presence of gas in shallow water wells. Oil discovered by deepening shallower gas failure. **Type Structure:** Domal type structure of large consequence, with series of sand lenses dipping off on the flanks, and spotted. Large domal proposition with minor saddles. **Producing Formation, Depth and Gravity:** Oakville-Catahoula, 1900-3400 ft, 8 sand lenses, all gas. 3600-3900 ft, (several lenses in big sand make this horizon appear to be several separate sands) 26 gr; Frio, 4900 ft, 31.4 gr; 5500 ft, 32 gr; 5800 ft, 38.9 gr; 6200 ft, 38.1 gr; 6500 ft, 42 gr; 6600 ft, 44 gr. **Producing Area:** 5920 acres, 3360 acres oil. **Extent of Development To Jan. 1, 1937:** 491 wells, 337 oil, 88 gas, 66 failures. During 6 months, 8 wells, 7 oil, 1 failure. **Deepest Test:** United Prod. Corp.'s J. J. O'Brien 12, 9225 ft; plugged back upper sands. **Estimated Ultimate Recovery:** 48,500,000 bbls. **Production Through 1936:** 32,966,884 bbls. **Indicated Remaining Reserve:** 15,533,116 bbls. **Daily Production July 1, 1937:** 5200 bbls. **Oil Outlets:** Humble Pipe Line Co., Atlantic Pipe Line Co., Houston Pipe Line Co., Texas Pipe Line Co., local buyers, 2 gasoline plants strip gas. Houston Oil Co., and United Gas Public Service Co. taking gas. **Rigs Running July 1, 1937:** 5. **Principal Leaseholders:** United Production Corp., Houston Oil Co., Phillips Petroleum Co., South Texas Production Co., The Texas Gas Co., Traylor Prod. Co., Saxet Oil Co., George E. Strauch, Cosmo Pet. Corp., Uscan Oil Co., Cowan & Sorey, Republic Natural Gas Co., Starrett Oil Co. **Remarks:** Numerous stringer sands at various levels are found in the general zone which is discussed above, but in cases where they provide only one or two wells they are included in the general group.

TOMOCONNOR

J. M. Swisher Sur, Blocks 3, 4, 5, 6, Chas. Hardwick, G. W. Main, Thos. Webb and J. Con Surs, 9 mi ne Refugio, James Hewittson, Carr & Connell, O. S. Hardwick,'s, M. J. Ximines. **Discovery Well:** Quintana Petroleum Co.'s Tom O'Connor 1, June 26, 1934, 545 bbls 38.8 gr oil; total depth 5580 ft, 7-in casing 5570 ft, sand 5574-80 ft, tubing pressure 425 lbs, casing 800 lbs, ⅝-in choke. **Means of Discovery:** Geophysical information. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** Frio, several sands between 5550 and 5900 ft, same group, 38-39 gr. **Producing Area:** 3640 acres. **Extent of Development To Jan. 1, 1937:** 66 wells, 65 oil, 1 failure. During 6 months, 1937: 72 wells, 71 oil, 1 failure. **Deepest Test:** Quintana Petroleum Co.'s Tom O'Connor 15-A; total depth 8174 ft, plugged back and set 7-in casing 5953 ft, perforated 5740-5825 and 5840-54 ft; completed Aug. 21, 1935, 155 bbls oil per day, ⅛-in choke; 350 lbs. tubing pressure; 875 lbs casing pressure. **Estimated Ultimate Recovery:** 125,000,000 bbls. **Production Through 1936:** 1,596,798 bbls. **Indicated Remaining Reserve:** 123,403,202 bbls. **Daily Production July 1, 1937:** 11,800 bbls. **Oil Outlets:** Humble Pipe Line Co., Texas Pipe Line Co, Atlantic Pipe Line Co. **Rigs Running July 1, 1937:** 15. **Principal Leaseholders:** Quintana Petroleum Corp., Hewitt & Dougherty, United Production Co., Josey-Burton, Illinois Petroleum Co., Nordan & Morris.

*Prospect. †Salt dome, no production. ‡Gas field.

SAN PATRICIO COUNTY

ANGELITA

Juan Hart Grant, 5 mi sw Odem. **Discovery Well:** Atkins & O'Niel and Continental Oil Co.'s J. F. Welder 1. April 25, 1934, 180 bbls 31.5 gr oil, ¼-in choke, 1550 lbs tubing pressure, 1750 lbs casing; total depth 5382 ft, producing horizon 5376-82 ft, elev 60 ft, 7-in casing 5375 ft, cap 5374-75 ft. **Means of Discovery:** Trend play, geological information, surface indications. **Type Structure:** Small sand lens. **Producing Formation, Depth and Gravity:** Frio, 5375 ft, 31.5 gr. **Producing Area:** 10 acres. **Extent of Development To Jan. 1, 1937:** 8 wells, 1 oil, 7 failures. During 6 months, 1937: None. **Deepest Test:** Humble Oil & Refining Co.'s J. F. Welder 1; abnd 7131 ft, April 22, 1935. **Estimated Ultimate Recovery:** 31,104 bbls. **Production Through 1936:** 31,104 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** None. **Oil Outlet:** Abandoned. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Wellington Oil Co., Humble Oil & Refining Co., Continental Oil Co.

ARANSAS‡

Section 40, Welder Ranch subdivision, 7 mi ne Sinton. **Discovery Well:** Aransas Oil Co.'s E. H. Welder 1, April 1, 1931, 30,000,000 cu ft gas ¼-in choke, 1480 lbs tubing, 1520 lbs casing pressure; total depth 3698 ft, producing horizon 3653-63 ft, plugged back 3663 ft. **Means of Discovery:** Trend play, geological information. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** From "big sand" just above top of Discorbis zone, 3650 ft, gas. **Producing Area:** 80 acres. **Extent of Development:** To Jan. 1, 1937: 7 wells, 3 gas, 4 failures. During 6 months, 1937: None. **Deepest Test:** Houston Gulf Co.'s Welder 4; abnd 6026 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Plymouth Oil Co.

MATHIS‡

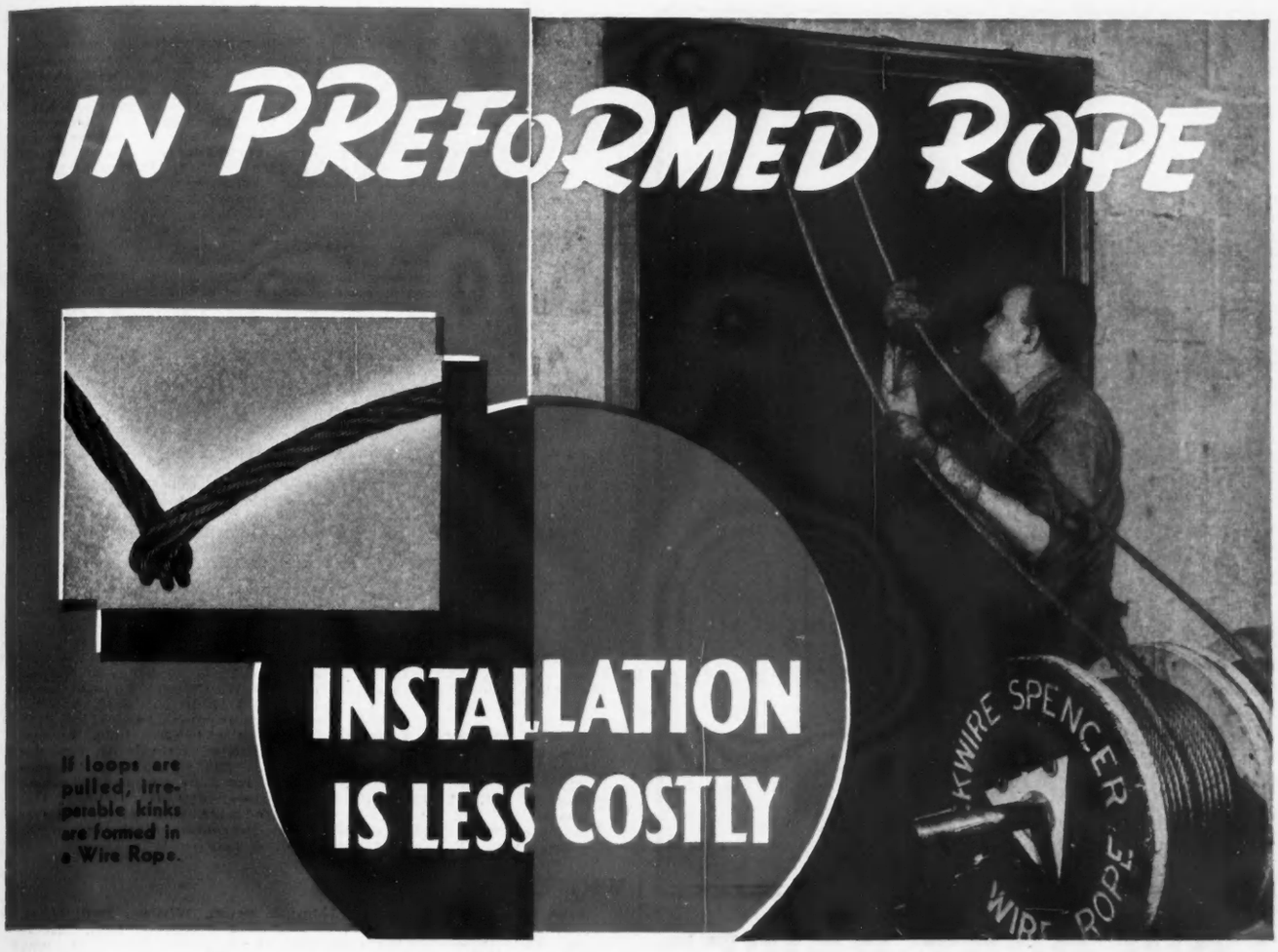
Ed. J. McGloin sur, near corner of Live Oak and Jim Wells Counties. **Discovery Well:** Plateau Oil Company's Collins 1, Dec. 5, 1924, 20,000,000 cu ft gas per day; 935 lbs rock pressure, total depth 2510 ft, 8¼-in casing 2375 ft, sand 2395-99 and 2403-14 ft. **Means of Discovery:** Geological data. **Type Structure:** Sand lensing and faulting. **Producing Formation, Depth and Gravity:** Miocene, 2500 ft, gas. **Producing Area:** 120 acres. **Extent of Development To Jan. 1, 1937:** 11 wells, 5 gas, 6 failures. During 6 months, 1937: None. **Deepest Test:** Magnolia Petroleum Co.'s D. L. Freeman 1, abnd 5526 ft. **Daily Production:** Shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Acreage open.

MIDWAY

Centering around Section 81, Pauls Subdivision, Coleman-Fulton Pasture Company Lands, 4 mi nw Gregory. **Discovery Well:** Phillips Petroleum Co.'s Schmidt 1, April 20, 1937, 3 bbls 34 gr oil considerable gas 5/32-in choke, tubing pressure 1680 lbs, casing pressure 1985 lbs, perforations 5337-40 ft with 9 shots, sand 5323-41 ft, total depth 7003 ft, plugged back to 5370 ft. **Means of Discovery:** Torsion Balance. **Type Structure:** Elongated domal type structure, extending ne-sw. **Producing Formation, Depth and Gravity:** Frio, 5340 ft, 34 gr. **Producing Area:** 40 acres. **Extent of Development During 6 Months, 1937:** 2 oil wells. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 320,000 bbls. **Production Through 1936:** New field. **Daily Production July 1, 1937:** 150 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Conroe Drilling Co., Phillips Petroleum Co., Gem Oil Co., Pan American Production Corp., Sun Oil Co., Tide Water Associated Oil Co., Atlantic Refining Co., Wellington Oil Co., Houston Oil Co., Magnolia Petroleum Co., The Texas Co., Shell Petroleum Corp., Humble Oil & Refining Co., Skelly Oil Co.

PLYMOUTH

Sections 44, 45, 46, 47, 48, 49, 50, 54, 55, 70, 71 Wilder subdivision, Sections 24, 34, 35 Taft subdivision, 8 mi ne Sinton. **Discovery Well:** Plymouth Oil Co.'s E. H. Welder 1-C, April 21, 1935, 265 bbls 32 gr oil, ⅝-in choke, 225 lbs tubing, 525 lbs casing pressure; total depth 5508 ft, producing horizon 5501-08 ft, elev 55 ft. **Means of Discovery:** Geological and geophysical work. **Type Structure:** Anticlinal structure with several local highs, some faulting, graben cuts lower portion of main field. **Producing Formation, Depth and Gravity:** All sands in Frio, 5500 ft, 32 gr; 5650 ft, 34.2 gr; 5900 ft, 38 gr. **Producing Area:** 2350 acres. **Extent of Development To Jan. 1, 1937:** 127 wells, 116 oil, 11 failures. During 6 months, 1937: 21 wells, 17 oil, 4 failures. **Deepest Test:** Sun Oil Co.'s M. K. Edgar 2, abnd 7030 ft, Feb. 20, 1936. **Estimated Ultimate Recovery:** 42,500,000 bbls. **Production Through 1936:** 3,958,211 bbls. **Indicated Remaining Reserve:** 38,541,789 bbls. **Daily Production July 1, 1937:** 9160 bbls. **Oil Outlets:** Republic Pipe Line Co. and Sinton Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Centennial Oil Co., Conroe Drilling Co., Magnolia Petroleum Co., Plymouth Oil Co., Heep Oil Corp., Humble Oil & Refining Co., Stanolind Oil & Gas Co., Sun Oil Co., Texon Royalty Co.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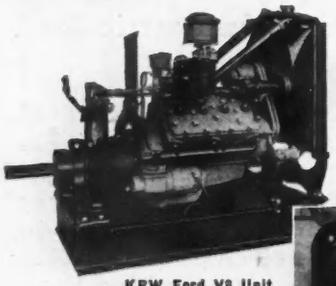

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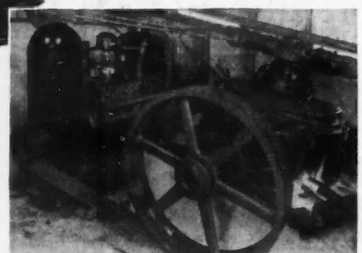

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SINTON

Sections 1, 2, 73, 74, 75 and 80, Welder subdivision, ½ mi n Sinton. **Discovery Well:** Plymouth Oil Co.'s E. H. Welder 1-A, May 13, 1934, 100 bbls 48 gr oil and 25,000,000 cu ft gas, ¼-in choke; total depth 6602 ft, producing horizon 5415-37 ft, elev 67 ft, 7-in casing 5404 ft, shale 5427-30 ft, sand 5430-34 ft, plugged back 5100 ft, sidetracked, re-drilled to 5434 ft. **Means of Discovery:** Geological and geophysical information. **Type Structure:** Sand lensing on anticlinal type structure. **Producing Formation, Depth and Gravity:** Frio, 5450 ft, 44 gr; 5900 ft, 33 gr. **Producing Area:** 1550 acres, 120 acres oil. **Extent of Development To Jan. 1, 1937:** 11 wells, 6 oil, 2 gas, 3 failures. During 6 months, 1937: None. **Deepest Test:** Heep Oil Corp.'s E. H. Welder 1-A (4), Dec. 16, 1934, 60 bbls 33 gr oil and 150 bbls salt water per day, ¼-in choke, 1160 lbs tubing pressure, 1900 lbs casing pressure; total depth 7247 ft, plugged back 5900 ft, perforated 5880-90 ft. **Estimated Ultimate Recovery:** 600,000 bbls. **Production Through 1936:** 60,867 bbls. **Indicated Remaining Reserve:** 539,133 bbls. **Daily Production July 1, 1937:** 25 bbls. **Oil Outlet:** Loading rack. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Plymouth Oil Company, Petrol Drilling Co., Heep Oil Co., Sun Oil Co. **Remarks:** Well showed high gas/oil ratio, accounting for low ultimate recovery figure—future wells may reduce gas/oil ratio and recover much greater amount of oil.

TAFT

Sections 23, 6, 1, Third Taft Farm Subdivision, William Burns, J. N. W. Ottman and Joseph Fesseben Surs, 3 mi n Taft. **Discovery Well:** Geo. E. Smith et al's J. L. Britton 1, Dec. 17, 1935, 425 bbls oil, ⅛-in and ¼-in choke, 450 lbs tubing, 650 lbs casing pressure; total depth 4901 ft, producing horizon 4872-01 ft, elev 52 ft, set 7-in casing 4879 ft. **Subsequent Discoveries:** Humble Oil & Refining Co.'s J. W. Mayo 10, Ottman Survey, Dec. 2, 1936, in sand 4351-75 ft, perforations 4910-12 ft, 241 bbls daily, ¼-in choke, tubing pressure 50 lbs, casing pressure 375 lbs, total depth 4937 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lens against faulting. **Producing Formation, Depth and Gravity:** Catahoula, 3900 ft, 24 gr; 4300 ft, 23.5 gr; Heterostegina, 4900 ft, 24.5 gr. **Producing Area:** 440 acres. **Extent of Development To Jan. 1, 1937:** 35 wells, 31 oil, 4 failures. During 6 months, 1937: 28 wells, 25 oil, 3 failures. **Deepest Test:** Humble Oil & Refining Co.'s J. W. Godwin 1, total depth 6352 ft, plugged back, sidetracked and re-drilled 4005 ft; completed 190 bbls oil, 9/64-in choke, tubing pressure 400 lbs, May 2, 1936. **Estimated Ultimate Recovery:** 10,000,000 bbls. **Production Through 1936:** 359,802 bbls. **Indicated Remaining Reserve:** 9,640,198 bbls. **Daily Production July 1, 1937:** 3525 bbls. **Oil Outlet:** Republic Pipe Line Co., Sinton Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Atlantic Refining Co., Conroe Drilling Co., L. A. Cage Producing Co., Eaves Oil Co., Humble Oil & Refining Co., Shell Petroleum Corp., Heep Oil Corp., O. W. Killam, Stanolind Oil & Gas Co.

WHITE POINT

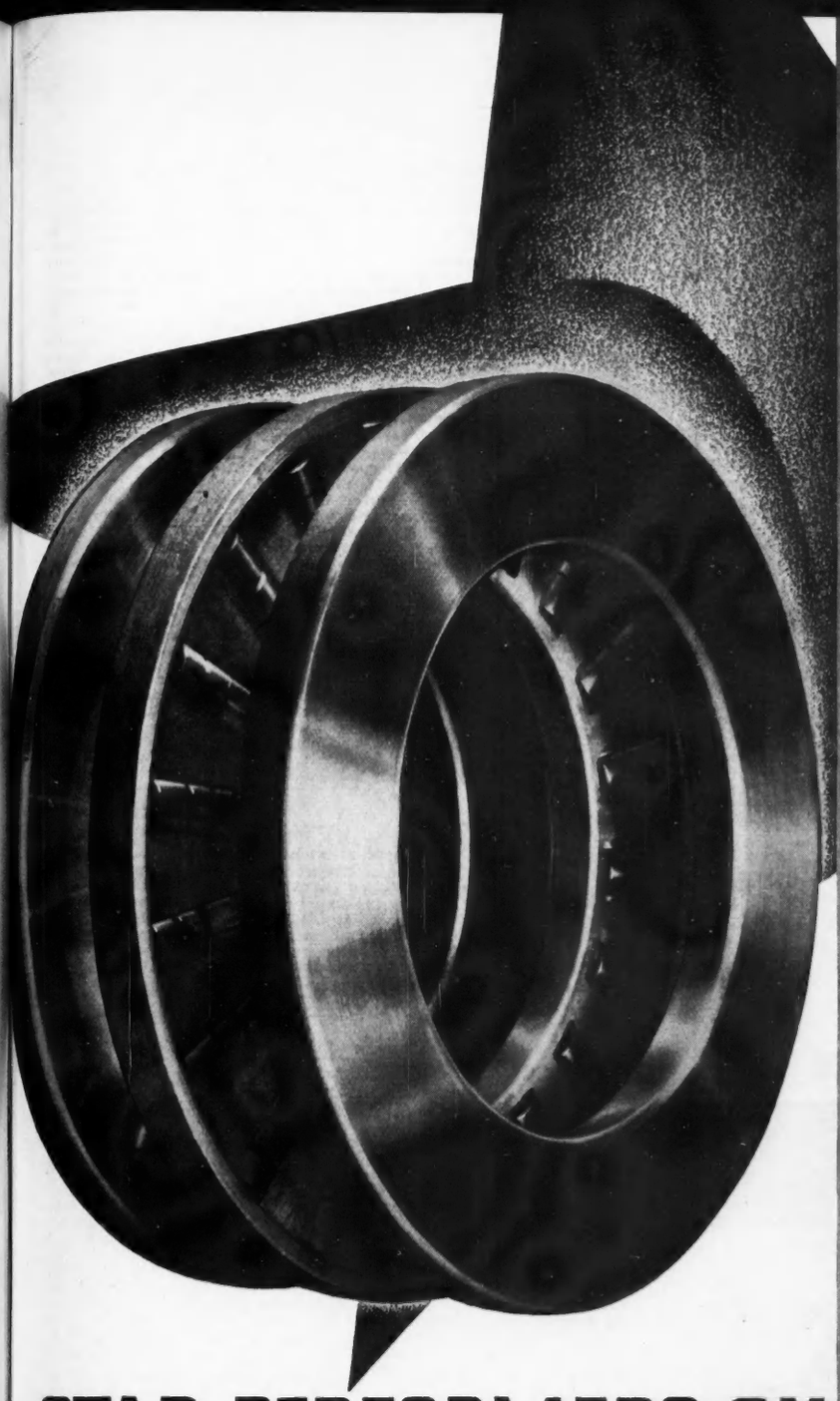
John Gravis, S. S. Gillette, John M. Segin, William Bell, M. M. Flores Surveys, Roos subdivision, 9 mi n Corpus Christi. **Discovery Well:** Prior to 1920 a number of tests were drilled, blowing out and making tremendous flows of gas, finally cratering and in several instances burning. Several tests flowed at rates estimated up to 150,000,000 cu ft per day. Sands between 1900 and 2800 ft finally developed after pressure overcome. **Means of Discovery:** Surface indications and geological information. **Type Structure:** Elongated anticline with axis running ne to sw and has a closure of approximately 60 ft on w and nw sides. **Producing Formation, Depth and Gravity:** Upper gas in several sands from Miocene series, 1900-2800 ft; Heterostegina, 4900 ft, 23.4 gr. **Producing Area:** 2950 acres, 60 acres oil. **Extent of Development To Jan. 1, 1937:** 74 wells, 3 oil, 49 gas, 22 failures. During 6 months, 1937: 1 oil well. **Deepest Test:** Saxet Oil Co.'s Rachel 19; total depth 7205 ft, plugged back and completed as shallow gasser May 25, 1933. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** 77,133 bbls. **Indicated Remaining Reserve:** 52,867 bbls. **Daily Production July 1, 1937:** 54 bbls. **Oil Outlet:** United Gas System, oil by trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Crown Central Petroleum Co., Saxet Oil Co., Houston Oil Co., Whitepoint Oil & Gas Co., Sun Oil Co., Stanolind Oil & Gas Co., United Production Co., Pan-American Prod. Corp.

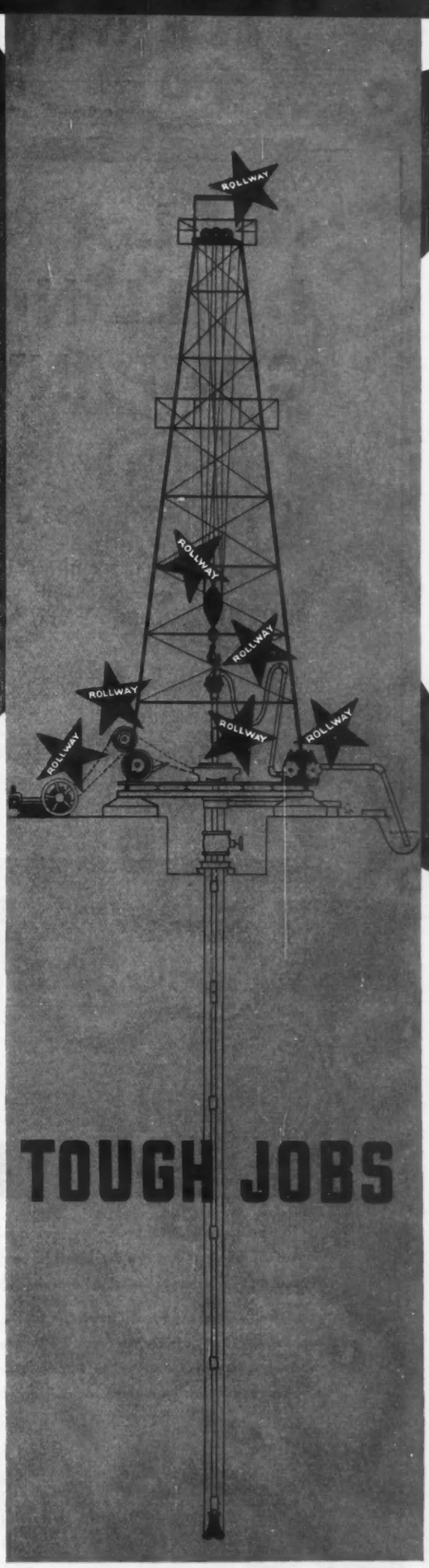
STARR COUNTY

ARROYO GRANDE*

Centering around the north end of Porcions 69, 70, 71 and 72 and several sections immediately n, 12 mi n Roma. **Means of Discovery:** Surface indications. Oyster escarpment is exposed. **Extent of Development:** About 20 wells, shallow and deep, have been drilled in the immediate area. Some oil and gas shows were encountered at shallow depths. Empire Gas & Fuel Co.'s Paza 1, drilled in 1924, encountered sand at 3208-14 ft and set casing atop the sand, the result being a 500,000 cu ft gasser spraying a little oil. Sand at 435-43½ ft in this well was estimated at 200,000 cu ft of gas. Another sand at 776-808 ft showed gas and at 2120 ft showed heavy oil. Six shallow gassers in the 400-ft sand have been completed. Great Plains Oil Co.'s Sanchez 1, in process of drilling for several years by several owners, abnd in Jan. 1935 failing to complete in oil sand at 3659-86 ft. Ash & Tackett's R. E. Margo 1, Block 4, Share 3-V, Portion 70, shower for about 2 bbls of 22 gr oil, 40 lbs shut in pressure at 372-76 ft, Nov. 14, 1935. Several other shallow wells were drilled in the vicinity of the Margo test without successful completing as producers. Two new tests to the deeper horizons were drilled during 1935, both by Sunray Oil Co. Munoz was abnd at 4008 ft and S. Sanchez & Bros. 1 was abnd at 4015 ft. Possibly should be referred to a field rather than a prospect.

*Prospect. †Salt dome, no production. ‡Gas field.





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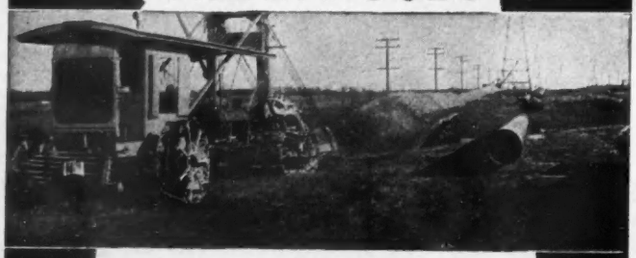

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BARBACOAS

Porciones 86, 87, 88 and 89, 8 mi ne Rio Grande City. **Discovery Well:** Jeffries Lambreth Drilling Co.'s Starr Cattle Co. 1, May 4, 1933, 20,000,000 cu ft gas 2455 ft; producing horizon 2450-55 ft. **Subsequent Discoveries:** K. E. Merren's Starr County Cattle Co. 1-A, Block 34 of Jefferies & Lambeth subdivision, porc 89, June 21, 1937, 396 bbls 58 gr oil 5/32-in choke, tubing pressure 2200 lbs, casing pressure 2350 lbs, through perforations 5376-98 ft, sanded up and was recompleted for 75 bbls distillate daily, large volume gas with 2500 lbs working pressure through perforations 5376-98 ft, 5/32-in choke, total depth 5418 ft. **Means of Discovery:** Geophysical survey. **Type Structure:** Domal type structure with sand lenses, indications of some faulting. **Producing Formation, Depth and Gravity:** Catahoula, 200 ft, 700 ft, gas; Frio 2450 ft, gas; 2500 ft, 24 gr, 2700 ft, gas; Cockfield, 5400 ft, 58 gr. **Producing Area:** 640 acres, 60 acres oil. **Extent of Development to Jan. 1, 1937:** 32 wells, 2 oil, 10 gas, 20 failures. During 6 months 1937: 2 wells, 1 oil, 1 failure. **Deepest Test:** Larkins & Warr's Kelsey Bros. 1; total depth 5453 ft, abnd in Yegua, showed gas 5282-5342 ft, July 1, 1936. **Estimated Ultimate Recovery:** 300,000 bbls. **Production Through 1936:** 23,469 bbls. **Indicated Remaining Reserve:** 276,531 bbls. **Daily Production July 1, 1937:** 18 bbls. **Oil Outlet:** Oil by trucks to local market, small gas line to Rio Grande City. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Merren, Jeffries & Johnson, Johnson & Bond, Larkins & Warr, Weekly Oil Co., Goodwin & Yantis.

CARRUTH*

Share 1-B, Porciones 91, 92, 2 mi e Barbacoas field. **Means of Discovery:** Geological information. **Extent of Development:** Lester & Duffield, Inc. and R. H. Vice et al drilled E. B. Carruth 1, March 20, 1935, 3,000,000 cu ft gas and 2 bbls oil per day. It was carried to 4016 ft, plugged back, sidetracked and drilled to 2908 ft, cementing 7-in casing at 2895 ft. It had gas sand at 2882-95 ft and oil sand 2895-2908 ft.

CLOPTON-GREEN*

Block 5, share 85, porcion 81, 9 mi n Rio Grande City. **Means of Discovery:** Geological data. **Extent of Development:** John H. Clopton et al's Green 1, drilled to 4620 ft, encountered sand section apparently at top of Jackson at 1593-1631 ft and a second sand apparently in the Yegua at 3818-22 ft, showing both oil and gas, but drilled to 4620 ft, plugged back and perforated 1604-14 ft, completed 5,000,000 cu ft gas spraying considerable salt water with 425 lbs rock pressure. Shut down May 24, 1937.

CUEVITAS

Porcions 110 and 111, Sacatosa and Cuevitas grants, n portion of county. **Discovery Well:** Sun Oil Co.'s Guerra 1-A, June 13, 1933, 17,000,000 cu ft gas and several bbls 34.8 gr oil, ⅜-in choke, sand 2209-19 ft, deepened to 2232 ft in sand and recompleted 385 bbls oil and 3,500,000 cu ft gas; 6⅝-in casing set 2208 ft. **Means of Discovery:** Geological information, correlation of several wells, and surface indications. **Type Structure:** Sand lensing structure with sand body ranging to 35 and 40 ft. **Producing Formation, Depth and Gravity:** From Mirando series of McElroy or Hockleyensis member of Middle Jackson about same position as Government Wells sand, 2050 ft, 32 gr; 2230 ft, 34.8 gr. **Producing Area:** 650 acres, 450 acres oil. **Extent of Development:** To Jan. 1, 1937: 35 wells, 11 oil, 6 gas, 18 failures. During 6 months, 1937: 1 oil well. **Deepest Test:** Sun Oil Co.'s Guerra, abnd 3600 ft in Cockfield. **Estimated Ultimate Recovery:** 2,500,000 bbls. **Production Through 1936:** 381,352 bbls. **Indicated Remaining Reserve:** 2,118,648 bbls. **Daily Production July 1, 1937:** 595 bbls. **Oil Outlet:** Sun Oil Co has 12,000 barrel storage tank on lease and ships oil from this tank by tank cars. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Sun Oil Co. has solid block in vicinity of field.

D. D. RANCH*

Centering around Sections 485 and 527, 20 mi ne Rio Grande City. **Means of Discovery:** Both geological and geophysical work. **Extent of Development:** Test drilled about 10 years ago had numerous showings. Development now being carried on by Transwestern Oil Co. and F. Davenport on T. B. Slick Estate property. First test, elev 470 ft, abnd Jan. 21, 1937, after encountering gas sand 5571-83 ft, shale 5583-89 ft and oily sand 5589-5607 ft, where the well attempted to blow out and stuck drill stem. Jackson was topped at 5560 ft. Second test abnd 5883 ft, after running much lower structurally and flowing hot sulphur water at 5885 ft. On July 1, 1937, another well was being commenced just north of the first test for an 8000-ft hole.

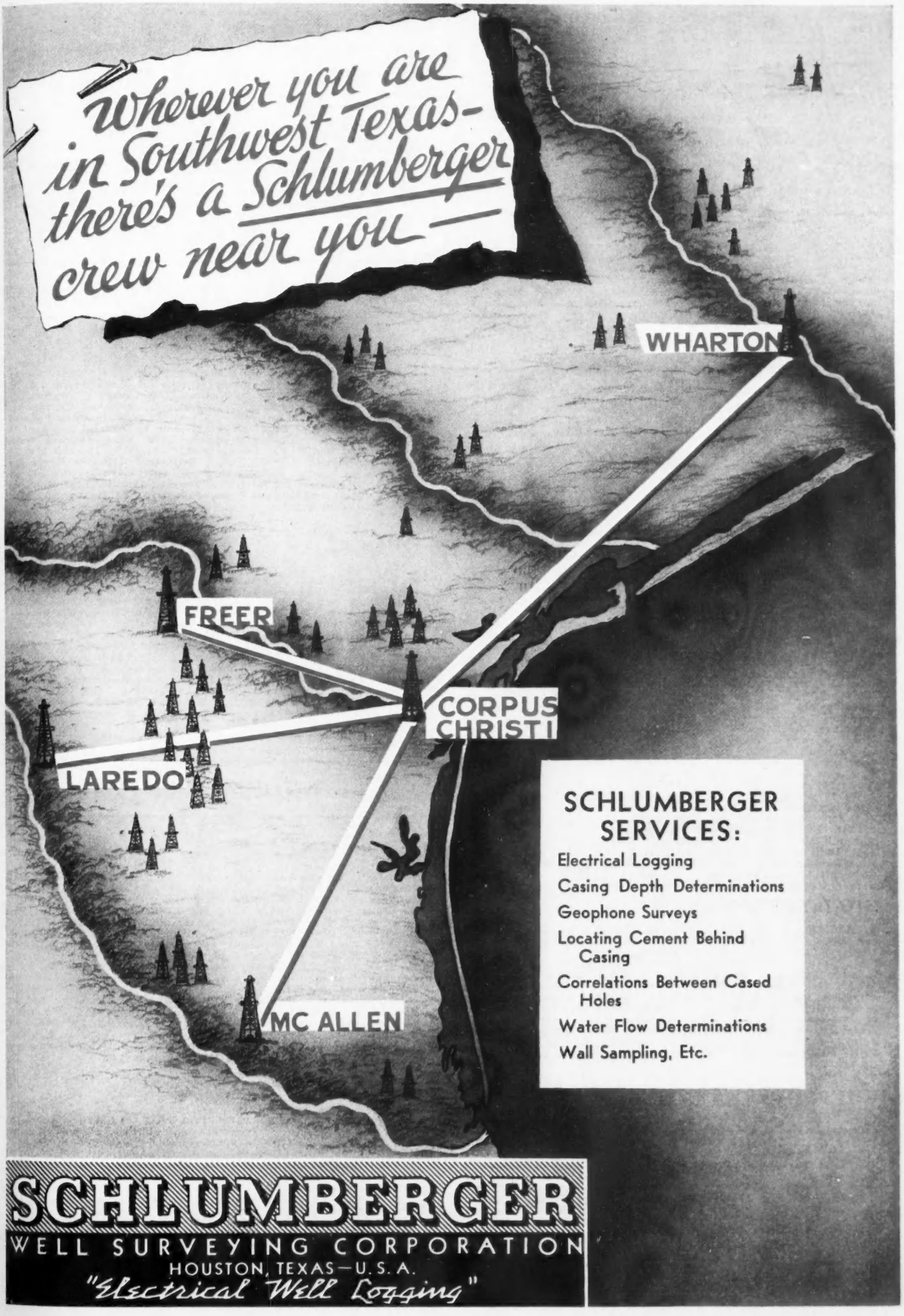
HAYDEN‡

Block 4, Share 47, Porc. 80, 5½ mi n Rio Grande City. **Discovery Well:** Howard Bass' Hayden et al 1, Jan. 11, 1937, 1444 ft, 7-in casing, 1336 ft, perf. 1305-18 ft, 5 mcf gas per day, 550 lbs. shut in pressure on casing. **Means of Discovery:** Geological information, trend development. **Type Structure:** Sand lensing—general high geological feature. **Producing Formation, Depth and Gravity:** Frio, 1300 ft, gas. **Producing Area:** Total 20 acres. **Extent of Development During 6 Months, 1937:** 1 gas well. **Deepest Test:** Discovery well. **Daily Production July 1, 1937:** Gas. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Howard Bass.

LOS OLMOS

Sections 5, 6, 7 and 8 of Porcions 75, 76 and 77. **Discovery Well:** Mercedes Oil & Gas Co.'s A. K. Bass 3, July 10, 1925, 2,000,000 cu ft gas, 540 ft, top sand 528 ft; elev 226 ft. **Means of Discovery:** Geological information, surface indications. **Type Structure:** Series of sand lenses rather than blanket sand, some faulting

*Prospect. †Salt dome, no production. ‡Gas field.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indicated. **Producing Formation, Depth and Gravity:** Frio, 400 ft, 18.5 gr; 550 and 700 ft, gas. **Producing Area:** 350 acres, 175 acres oil. **Extent of Development to Jan. 1, 1937:** 149 wells, 76 oil, 12 gas, 61 failures. During 6 months, 1937: 5 wells, 1 gas, 4 failures. **Deepest Test:** Producers Oil Co.'s Kelsey Bass 1, abnd 2612 ft, Oct. 1, 1911; sand 2040-2129 ft. **Estimated Ultimate Recovery:** 750,000 bbls. **Production Through 1936:** 473,202 bbls. **Indicated Remaining Reserve:** 276,798 bbls. **Daily Production July 1, 1937:** 145 bbls. **Oil Outlet:** Pipe line to Rio Grande City. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** H. Webster Powers, Ed Linberg, St. Mary's Oil & Gas Co., Rio Oil & Gas Co., Walter E. Hopper, K. Garrison, J. P. Kennedy.

RICABY

Centers around the central portion of Porcion 83, Juris. of Carmargo, 6 mi ne Rio Grande City. **Discovery Well:** Moss & Heard's Ricaby 1, Feb. 1, 1937, 100 bbls of fluid, most of which 24 gr oil per day ⅛-in choke, total depth 1400 ft, plugged back to 1316½ ft, sand 1312-16½ ft, 7-in casing 1307 ft. **Subsequent Discoveries:** Moss & Heard's Ricaby 3, March 28, 1937, 12 bbls 30 gr oil per hour ¼-in choke, tubing pressure 225 lbs, casing pressure 450 lbs, sand 1604-11 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing, some nosing along strike line. **Producing Formation, Depth and Gravity:** Frio, 1300 ft, 24 gr; 1600 ft, 30 gr. **Producing Area:** 20 acres. **Extent of Development During 6 Months, 1937:** 4 wells, 2 oil, 2 failures. **Deepest Test:** Moss & Heard's Ricaby 2, abnd 2011 ft, May 22, 1937. **Estimated Ultimate Recovery:** 120,000 bbls. **Production Through 1936:** None. (New field). **Daily Production July 1, 1937:** 250 bbls. **Oil Outlet:** Trucks to local market—line to loading rack planned. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Moss & Heard. Sun Oil Co.

RIO GRANDE CITY

Porcions 80 and 81, ne Rio Grande City. **Discovery Well:** Sioux Oil Corp.'s Wood et al (Heard & Heard) 1, May 31, 1932, 75 bbls 27.3 gr oil, 1380 ft, producing horizon 1375-80 ft, elev 178 ft. **Means of Discovery:** Geological information, surface indications as result of escarpment. **Type Structure:** Faulting and sand lensing narrow, spotted producing section. **Producing Formation, Depth and Gravity:** Frio, 1350 ft, 27.3 gr. **Producing Area:** 140 acres. **Extent of Development to Jan. 1, 1937:** 71 wells, 30 oil, 41 failures. During 6 months, 1937: 3 failures. **Deepest Test:** Hiriam Reed's Doyno Chatfield 1-A, abnd 3258 ft. Sept. 5, 1935. **Estimated Ultimate Recovery:** 560,000 bbls. **Production Through 1936:** 237,880 bbls. **Indicated Remaining Reserve:** 322,120 bbls. **Daily Production July 1, 1937:** 218 bbls. **Oil Outlet:** By trucks to local market. Also via loading rack on railroad. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Coreta Oil Inc., Fech Oil Co., Moss-Bass, H. M. Reed, Sioux Oil Corp., M. P. Evans, Goodwin & Zimmerman, R. G. Hall, John H. Clopton.

ROMA

Porcions 67, 68, 69, 70, 71 and 72, extends n from Roma and s from same point into Mexico. **Discovery Well:** M. Guerra's Fee 1, Oct. 28, 1927, 1,500,000 cu ft gas, total depth 200 ft, producing horizon 192-200 ft; elev 286 ft. **Means of Discovery:** Surface geology by The Texas Co., Shell Petroleum Corp. and Huasteca Petroleum Corp., also information based on shallow wells. **Type Structure:** Anticlinal structure, extending nw-se with axis of structure running nw from a point about ½ mi w of Roma. Top of structure 3 mi nw Roma. **Producing Formation, Depth and Gravity:** Shallow gas from near contact of Frio and Jackson, 200 ft; Queen City section of Mount Selman, 3560 ft, 35 gr. **Producing Area:** 300 acres, 20 acres oil. **Extent of Development to Jan. 1, 1937:** 14 wells, 1 oil, 4 gas, 9 failures. During 6 months, 1937: None. **Deepest Test:** The Texas Co.'s M. Guerra & Son 1, abnd 4827 ft; sands 256-60, 3374-3519, 3589-3610, and 4742-93 ft; elev 284 ft. **Estimated Ultimate Recovery:** 20,000 bbls. **Production Through 1936:** 9217 bbls. **Indicated Remaining Reserve:** 10,783 bbls. **Daily Production July 1, 1937:** 5 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** The Texas Co. controls practically entire block.

SANTO DOMINGO‡

Porcion 92, 6 mi w Samfordyce field, 1 mi n Rio Grande. **Discovery Well:** John Clopton et al's Roos & Bennett 3, Jan. 26, 1936, 15,000,000 cu ft gas, 1050 lbs tubing, 1100 lbs casing pressure; total depth 4003 ft, producing horizon 2461-2616 ft, elev 152 derrick floor; plugged back and set 5-in casing 2630 ft, perforated 2415-17 ft. **Means of Discovery:** Geological information. **Type Structure:** Anticlinal type structure. **Producing Formation, Depth and Gravity:** Frio, 2450 ft, gas. **Producing Area:** 20 acres. **Extent of Development To Jan. 1, 1937:** 2 wells, 1 gas, 1 failure. During 6 months, 1937: None. **Deepest Test:** Discovery. **Daily Production July 1, 1937:** Gas, shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** John Clopton, Porter et al, Argo Royalty Co., D. D. Oil Co.

SOUTH RICABY

Porcion 84, Jurisdiction of Carmargo, 4⅛ mi ne Rio Grande City. **Discovery Well:** G. E. Dodd, Trustee's B. D. Wood, Trustee 1, May 25, 1937, 40 bbls 31 gr oil per hour 5/16-in choke, tubing pressure 200 lbs, casing pressure 150 lbs, sand 1735-49 ft, shale 1749-54 ft, 7-in casing 1735 ft, elev 290 ft, df. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing. Possibly flank production on large structural feature to w. **Producing Formation, Depth and Gravity:** Frio, 1750 ft, 31 gr. **Producing Area:** 30 acres. **Extent of Development During 6 Months, 1937:** 5 wells, 4 oil, 1 failure. **Deepest Test:** Sun Oil Co.'s Wardner 1, 1785 ft, June 26, 1937. **Estimated Ultimate Recovery:** 300,000 bbls. **Production Through 1936:** None. (New field). **Daily Production July 1, 1937:** 250 bbls. **Oil Outlet:** By trucks, gathering system and line to railroad proposed. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** Sun Oil Co., G. E. Dodd, Trustee, Palmetto Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

WOODS‡

South ends of Porcions 83 and 84, 3 mi se Rio Grande City. **Discovery Well:** A. J. Weyel Jr.'s Wardner 1, blew out Jan. 15, 1936, at 2051 ft, ran wild for several weeks, blowing gas and salt water, later abd. Ed Leach et al's Dana Estate (Wood) 1, was completed July 23, 1936, total depth 1028 ft, sand 963-75 ft, flowed 10,000,000 cu ft gas, 460 lbs pressure. Opened new field, several wells blew out prior to this completion but this should be classified as discovery well. **Means of Discovery:** Geological data. **Type Structure:** Anticlinal structure, possibly nw-se strike. **Producing Formation, Depth and Gravity:** Frio, 975 ft, gas. **Producing Area:** 120 acres. **Extent of Development To Jan. 1, 1937:** 7 wells, 4 gas, 3 failures. **During 6 Months, 1937:** None. **Deepest Test:** Hughston Oil Co.'s Wood-Greeg 1; abnd 3360 ft, June 17, 1935. **Daily Production July 1, 1937:** Gas. **Oil Outlet:** Local market. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** A. J. Weyel, Trustee, Ed. Laech, Hughston Oil Co., Killam & Staggs.

TRAVIS COUNTY

KIMBRO

Kimbro and T. Smith Surs. **Discovery Well:** W. F. Billingslea et al's Lundgren 1, Sept. 7, 1935, 40 bbls oil, total depth 670 ft, producing horizon 660-70 ft. **Means of Discovery:** Geological information. **Type Structure:** Igneous plug. **Producing Formation, Depth and Gravity:** Serpentine, 670 ft, 36.5 gr. **Producing Area:** 10 acres. **Extent of Development To Jan. 1, 1937:** 12 wells, 2 oil wells, 10 failures. During 6 months, 1937: None. **Deepest Test:** W. Albrecht and F. Brinkrueder's M. C. Swenson 1; abnd 1280 ft in Edwards lime, April 20, 1936. **Estimated Ultimate Recovery:** Included in Manda. **Daily Production July 1, 1937:** Included in Manda. **Oil Outlet:** Oil is trucked to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** W. F. Billingslea, Artz & Co., Albrecht & Brinkrueger.

MANDA

J. B. Kemper Sur, e part of county. **Discovery Well:** Humble Oil & Refining Co.'s C. J. Peterson 1, Oct. 4, 1934, 10 bbls oil, total depth 740 ft, top serpentine 631 ft, oil show 666-78 ft, 6⅝-in casing 664. **Means of Discovery:** Geophysical prospect checked by magnetometer. **Type Structure:** Igneous plug. **Producing Formation, Depth and Gravity:** Serpentine, 740 ft, 36.5 gr. **Producing Area:** 30 acres. **Extent of Development To Jan. 1, 1937:** 12 wells, 4 oil wells, 8 failures. During 6 months 1937: None. **Deepest Test:** Walden Oil Co.'s P. C. Willis estate 1; abnd 1050 ft, March 10, 1936, in chalk. **Estimated Ultimate Recovery:** 40,000 bbls. **Production Through 1936:** 17,977 bbls. **Indicated Remaining Reserve:** 62,023 bbls. **Daily Production July 1, 1937:** 6 bbls. **Oil Outlet:** Railroad. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** J. E. Robertson et al. **Remarks:** Production to reserve figures include Manda and Kimbro.

VICTORIA COUNTY

BLOOMINGTON*

Includes C. Creamer & Kemper surveys, e of Guadalupe River and between the river and Black Bayou, n of Calhoun County line, ne McFaddin field. **Means of Discovery:** Torsion Balance work by Petty Geophysical Engineering Corp. Block rechecked by Humble Oil & Refining Company in 1932 when block of 4500 acres taken from Petty. **Extent of Development:** Humble Oil & Refining Co.'s Peter Rydolph, north central section of 395-acre tract in Kemper sur, drilled to 6962 ft and abnd Nov. 1, 1932, sand at 3185-95 ft, where it developed 1250 lbs pressure on a 3-min drill-stem test, with a volume flow of about 40,000,000 cu ft, deepened to 5200 ft, a second drill-stem test sprayed oil. A test at 5232-43 ft tested salty water and mud. Another test at 6502-12 ft showed 6200 ft salt water, little gas and rainbow of oil, 4 min on ⅜-in choke. Production in this well found at same level as in the Slick-Seeligson Corp. well to the w and in the McFaddin field, leading to the belief that this prospect is in reality a portion of the McFaddin field.

COLETTO CREEK

R. Manchola grant, 6 mi sw Victoria. **Discovery Well:** Stoneleigh Oil & Gas Co.'s Etta B. Terrell 1, June 10, 1933, 168 bbls 37.8 gr oil, 7/32-in choke; 1735 lbs casing pressure; total depth 4437 ft, producing horizon 4423-37 ft, elev 65 ft, 20,000,000 cu ft gas and 168 bbls 37.8 gr oil. **Means of Discovery:** Surface geology. **Type Structure:** Anticlinal structure. **Producing Formation, Depth and Gravity:** Catahoula 2175 ft, gas; 2210 ft, 19.5 gr; 2850 ft, 24 gr; Frio 4450 ft, 37.8 gr. **Producing Area:** 480 acres, 280 acres oil. **Extent of Development To Jan. 1, 1937:** 41 wells, 23 oil, 4 gas, 14 failures. During 6 months 1937: None. **Deepest Test:** Albert Plummer's Zimmer 1, abnd 5371 ft, Oct., 1934. **Estimated Ultimate Recovery:** 2,300,000 bbls. **Production Through 1936:** 47,674 bbls. **Indicated Remaining Reserve:** 1,808,326 bbls. **Oil Outlet:** Leo Glover Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** American Liberty Oil Co., Bay Oil & Gas Co., Benson Drilling Co., Nutex Oil Co., Plummer Oil Corp., Cox & Hamon, Trans-State Oil Co.

EXPERIENCE

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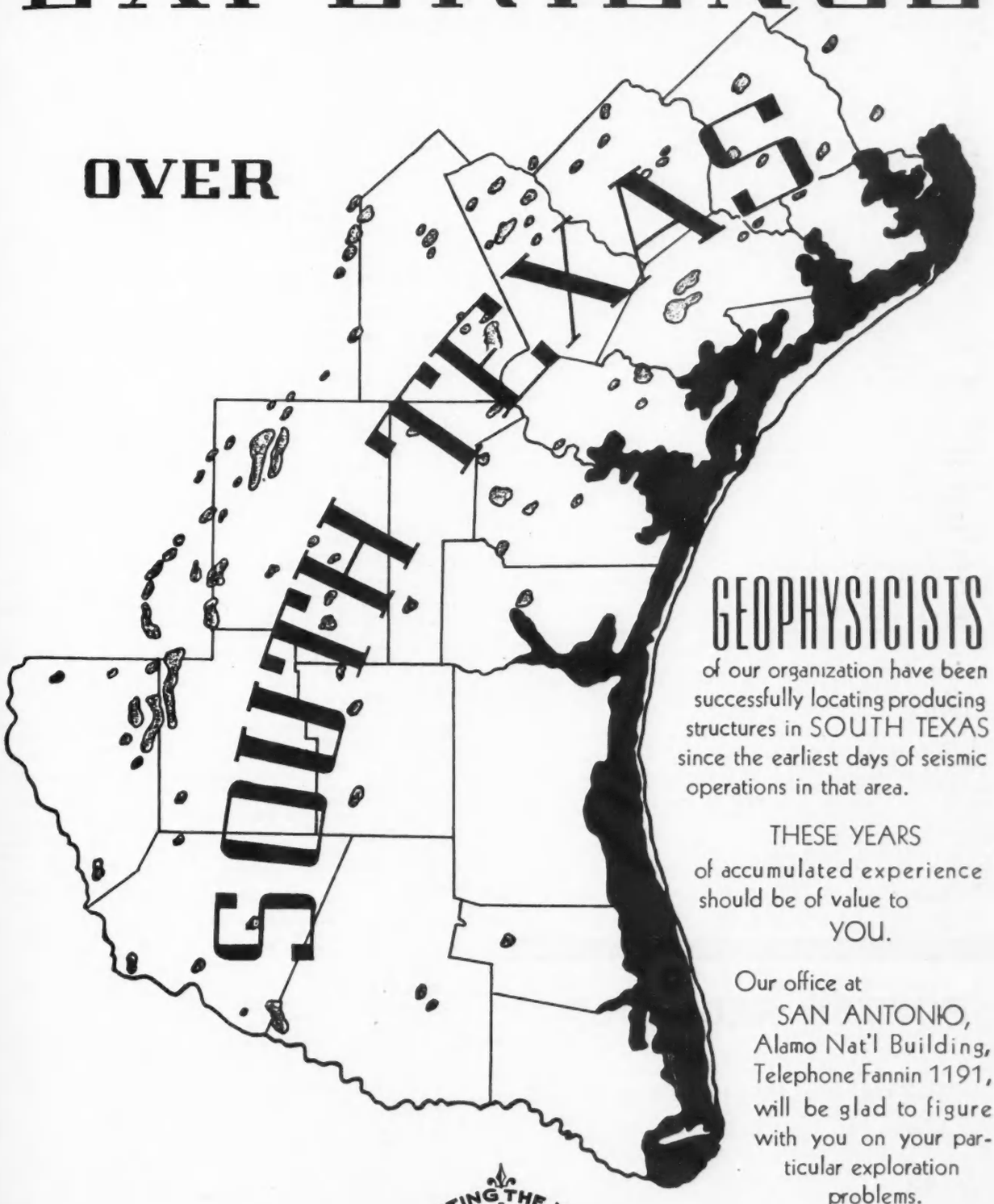

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FORDTRAN‡

T & NO Section 14, corner Dewitt, Lavaca, Victoria and Jackson Counties. **Discovery Well:** The Texas Co.'s Midgett 1, Oct. 14, 1934; 10,000,000 cu ft gas per day, total depth 5750 ft, producing horizon 2823-40 ft, 7-in casing 2823 ft. **Means of Discovery:** Seismograph and Torsion Balance. **Type Structure:** Anticline. **Producing Formation, Depth and Gravity:** Catahoula, 2840 ft. gas. **Producing Area:** 20 acres. **Extent of Development To Jan. 1, 1937:** 3 wells, 1 gas, 2 failures. During 6 months, 1937: None. **Deepest Test:** Discovery. **Daily Production July 1, 1937:** Only gas. **Outlet:** Southwest Gas Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** The Texas Co.

HUGHES

F. Dimmitt Grant, 2½ mi se Victoria. **Discovery Well:** Portilla Drilling Co.'s P. H. Welder 1, Aug. 16, 1936, 20,000,000 cu ft gas, 4279 ft, 1500 lbs rock pressure, producing horizon 4276-79 ft, well showed some oil. **Subsequent Discoveries:** Portilla Drilling Co., P. H. Welder 2, Sept. 9, 1936, 125 bbls 43 gr oil per day, ⅛-in choke, tubing pressure 650 lbs, casing pressure 800 lbs; 4857 ft; producing horizon 4851-54 ft; later went to salt water, deepened to 5095 ft and abnd. **Means of Discovery:** Magnetometer and geological survey. **Type Structure:** Domal type structure, some sand lensing and faulting. **Producing Formation, Depth and Gravity:** Marginulina 4280 ft, gas; Frio, 4850 ft, 43 gr. **Producing Area:** 40 acres, 20 acres oil. **Extent of Development To Jan. 1, 1937:** 4 wells, 1 oil well, 1 gas, 2 failures. During 6 months, 1937: None. **Deepest Test:** Welder Oil & Gas Co.'s P. H. Welder 1, abnd Dec. 8, 1935, 6015 ft. It had shown 150 lbs pressure, 180 ft of mud cut with gasoline and 800 ft of salt water at 5065 ft. **Estimated Ultimate Recovery:** Gas field. (Oil well produced several days then deepened.) **Daily Production July 1, 1937:** Gas. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Portilla Drilling Co.

KEERAN

Martin de Leon Sur, 15 mi se Victoria. **Discovery Well:** CR&M Drilling Co. and C. B. Bunte et al's Keeran 1, Jan. 31, 1932, 50,000,000 cu ft gas, 30 bbls gasoline, ¼-in choke, 2250 lbs working pressure; total depth 5191 ft, producing horizon 5831-41 ft. **Means of Discovery:** Geological and geophysical information; torsion balance and seismograph. **Type Structure:** Domal type structure, closure to e not yet defined. **Producing Formation, Depth and Gravity:** Marginulina, 5190 ft, gasoline; Frio, 5500 ft, 56 gr; 5700 ft, 37 gr; 5840 ft, 38 gr. Several intermediate sand lenses which should be grouped with above sections. **Producing Area:** 650 acres, 360 acres oil. **Extent of Development To Jan. 1, 1937:** 13 wells, 5 oil, 3 gas, 5 failures. First 6 months, 1937: 5 wells, 4 oil, 1 failure. **Deepest Test:** Humble Oil & Refining Co.'s J. Mitchell 2, abnd 7715 ft in top of Vicksburg, Sept. 16, 1934. **Estimated Ultimate Recovery:** 5,400,000 bbls. **Production Through 1936:** 558,293 bbls. **Indicated Remaining Reserve:** 4,841,707 bbls. **Oil Outlet:** Gulf Pipe Line Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** Gulf Oil Corp., Humble Oil & Refining Co., Stanolind Oil & Gas Co., Union Oil Co. of California.

McFADDIN

Including portions of Maria Josefa Travura, J. Varin, C. O. Edwards, Foster Lewers, Field Jones, C. M. B. Hoyd, John Rine and adjoining surveys. **Discovery Well:** Lion Oil & Refining Co.'s A. M. McFaddin 1, June 21, 1930, 40,000,000 cu ft gas, ⅜-in choke; 1750 lbs casing pressure; total depth 3749 ft, elev 36 ft, sand 3742-49 ft. **Means of Discovery:** Geological subsurface work and shallow water wells. **Type Structure:** Large anticlinal type structure, possible several local saddles and sand lenses from which oil and gas will be developed. Larger gas sands (mainly 3700-ft) are generally a blanket affair. **Producing Formation, Depth and Gravity:** Oakville through Marginulina producing gas, mainly at 2000, 2200, 2450, 3500, 3700, 4700 (sprayed some oil) and 5180 ft; Frio, 5830 ft, 38 gr; 6175 ft, 47 gr. **Producing Area:** 12,000 acres, 50 oil. **Extent of Development To Jan 1, 1937:** 30 wells, 2 oil, 11 gas, 17 failures. First 6 months, 1937: None. **Deepest Test:** The Texas Co.'s A. M. McFaddin 3, deepened to 7025 ft, and abnd, was completed Jan. 1, 1932, at 5828-32 ft for 750 bbls per day ⅝-in choke, but went dead. **Estimated Ultimate Recovery:** 100,000 bbls. **Production Through 1936:** 96,435 bbls. **Indicated Remaining Reserve:** 3565 bbls. **Daily Production July 1, 1937:** Gas, oil well shut in. **Oil Outlet:** Local outlet. Gas to United Gas System. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** The Texas Co., Houston Oil Co., United Production Corp., Lion Oil & Refining Co., Shell Petroleum Corp., Humble Oil & Refining Co., Transwestern Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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Plaza Hotel Tunnel
Corpus Christi, Texas

NURSERY*

S. de Leon, A. A. & M. G. Railroad, I. R. R. Railroad surveys, n of Nursery. **Means of Discovery:** Geological and Geophysical information. **Extent of Development:** Quintana Petroleum Co., drilled S. W. McCormick 1, abnd March 29, 1933, at 7400 ft, about 150 ft in Cook Mountain. Well showed 1500 lbs pressure from a section of sand and shale at 3330-6030 ft. Humble Oil & Refining Co. had previously drilled J. Welder 3-A to 5896 ft.

PLACEDO

Nancy Dean, Wm. Rupley, E. Benevides, S.A.&M.G. Railway, J. Brownson, A. Murray surveys, at Placedo. **Discovery Well:** L. A. Gillispie et al's Henderson & Pickering 1, April 13, 1935, 341 bbls 35 gr oil, 3/16-in choke, 1700 lbs tubing, 2300 lbs casing pressure, total depth 6018 ft, producing horizon 6005-18 ft, 7-in casing 6001 ft, elev 56 ft derrick floor. **Means of Discovery:** Geophysical prospect, trend play, geological information. **Type Structure:** Anticlinal structure with some sand lenses. **Producing Formation, Depth and Gravity:** Heterostegina 4700-4800 ft, 23.5 gr; Frio, 5330 ft, gas and distillate; 6000 ft, 35.5 gr. **Producing Area:** 2200 acres, 1620 acres oil. **Extent of Development To Jan. 1, 1937:** 114 wells, 102 oil, 4 gas, 8 failures. During 6 months, 1937: 48 wells, 45 oil, 1 gas, 2 failures. **Deepest Test:** Barnsdall & American Liberty's J. M. Pickering et al's 10, William Rupley survey, drilled to 6785 ft, June 26, 1937, completed as gasser making 20,000,000 cu ft gas daily through perforations 5332-43 ft, 1375 lbs. pressure. **Estimated Ultimate Recovery:** 29,500,000 bbls. **Production Through 1936:** 1,504,478 bbls. **Indicated Remaining Reserve:** 27,995,522 bbls. **Daily Production July 1, 1937:** 8650 bbls. **Oil Outlet:** Barnsdall Pipe Line Co. and Humble Pipe Line Co. Several loading racks to railroads crossing field. **Rigs Running July 1, 1937:** 7. **Principal Leaseholders:** American Liberty Oil Co., Barnsdall Oil Co., Shell Petroleum Corp., Felmont Oil Corp., Crown Central Petroleum Corp., Eastern Texas Oil Co., Costa Oil Co., Magnolia Petroleum Co., Sun Oil Co., Superior Oil & Gas Co., E. L. Smith, Abercrombie & Harrison, Commonwealth Oil & Gas Co., J. C. Drilling Co., H. B. Ownsby Drilling Co., Westgate-Greenland Oil Co., Yost & Yost.

TELFERNER‡

T & NO Railroad Section 1, 4 mi nw Telferner. **Discovery Well:** Magnolia Petroleum Co.'s Beck 1, Jan. 7, 1937, 27½ million cu ft gas open casing, flow through ½-in choke; tubing pressure 1000 lbs; casing pressure 1500 lbs; td 4812 ft, plug back to 3590 ft, perforated 3578-82 ft. **Subsequent Discoveries:** Magnolia Petroleum Co.'s Wagner 1, April 21, 1937, total depth 4240 ft, plugged back 2528 ft, perforated casing 2519½-24 ft, made dry gas sand 2516-29½ ft. **Means of Discovery:** Surface evidence. Subsurface correlations. Torsion balance and seismograph. **Type Structure:** Probable salt dome. **Producing Formation, Depth and Gravity:** Oakville, 2525 ft, gas; Catahoula, 3580 ft, gas. **Producing Area:** 40 acres. **Extent of Development To Jan. 1, 1937:** 4 failures. First 6 months, 1937: 2 gas wells. **Deepest Test:** Houston Oil Co.'s McFaddin 1-A, abnd 6480 ft. **Daily Production July 1, 1937:** Gas. **Oil Outlet:** Use gas on lease. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Magnolia Petroleum Co. **Remarks:** This well is several hundred ft higher than nearby wells, indicating a rather important uplift, may be a salt dome.

THOMASTON*

F. H. & M. G. Section 15, 9 mi n Nursery, S. A. & M. G. Survey, near DeWitt city line. **Extent of Development:** Plymouth Oil Co.'s R. H. Welder 1, abnd 6181 ft, Nov. 22, 1936. Drill-stem test 5641-60 ft recovered 20 ft mud cut with oil, 225 lbs pressure, 15 min.

WARDEN‡

Edward McDonough league, 12 mi s Victoria. **Discovery Well:** The Texas Co. et al's J. J. Warden 1, 3,000,000 cu ft gas, ¼-in choke, 1800 lbs tubing, 1840 lbs casing pressure, 5629 ft, producing horizon 4488-96 ft, elev 110 ft, plugged back and redrilled to 4496 ft. **Means of Discovery:** Geophysics. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Marginulina, 4500 ft, gas. **Producing Area:** 20 acres. **Extent of Development To Jan. 1, 1937:** 1 gas well. During 6 months, 1937: None. **Deepest Test:** Discovery. **Daily Production July 1, 1937:** Gas; well shut in. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** The Texas Co., Standard Oil Co. of Texas, Shell Petroleum Corp.

JAY WELDER RANCH

Centering around Samuel Belding survey, 7 mi e Nursery. **Means of Discovery:** Geophysical survey. **Extent of Development:** Plymouth Oil Co.'s J. J. Welder 1, abnd Jan. 15, 1937, 6648 ft. Had series of sands through the Cockfield and Yegua. One at 5666-5727 ft developed 650 lbs pressure with 1 joint of mud cut with distillate. Several other similar shows encountered. Plymouth Oil Co.'s J. J. Welder 1-A, Samuel Belding survey, 7 mi e Nursery, abnd 3941 ft, March 10, 1937.

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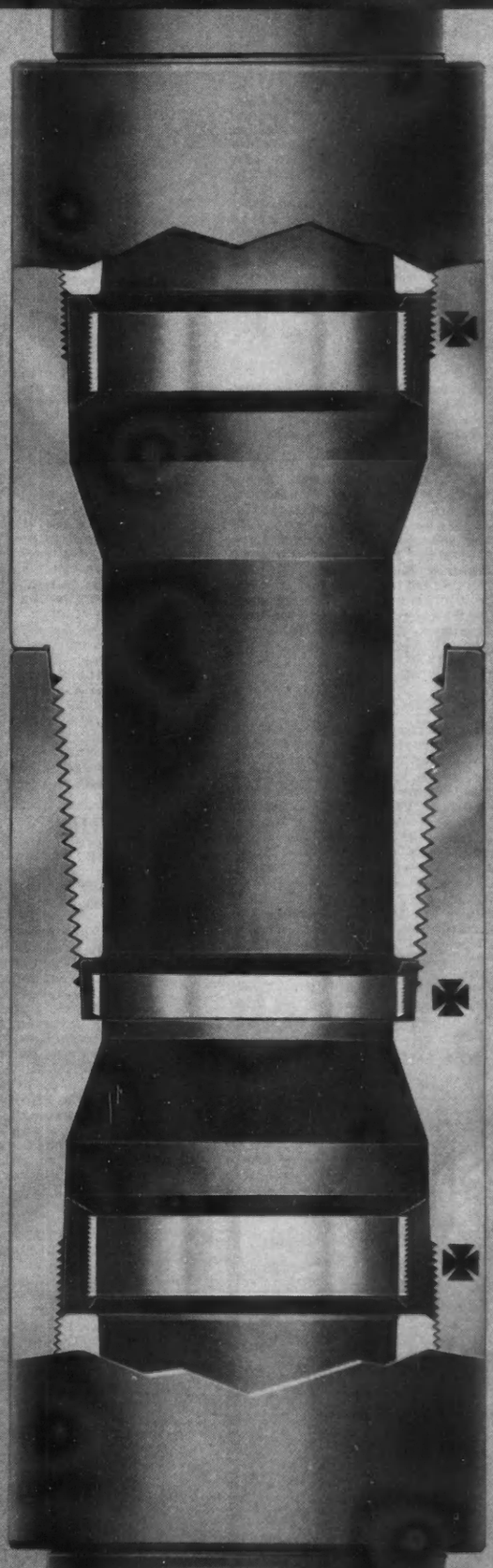

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WEBB COUNTY

ALBERCAS

Albecas grant, se part country. **Discovery Well:** Simms Oil Co.'s A. M. Bruni 1, March 16, 1927, 50,000,000 cu ft gas, spray 21 gr oil, 2158 ft, sand 2141-58 ft, 6⅝-in 2155 ft, 600 lbs rock pressure, elev 837 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lens on fold. **Producing Formation, Depth and Gravity:** Upper Jackson, 2150 ft., 21 gr. **Producing Area:** 450 acres; 250 acres oil. **Extent of Development To Jan. 1, 1937:** 114 wells, 88 oil, 12 gas, 14 failures. During 6 months 1937: None. **Deepest Test:** O. W. Killam's A. M. Bruni 1, Block 55, Albercas Grant, abnd 3710 ft, Jan. 27, 1935. **Estimated Ultimate Recovery:** 2,900,000 bbls. **Production to July 1, 1937:** 2,439,-132 bbls. **Indicated Remaining Reserve:** 440,868 bbls. **Daily Production July 1, 1937:** 65 bbls. **Oil Outlet:** Humble Pipe Line Co. and Texapata Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** O. W. Killam, South Texas Production Co., Magnolia Petroleum Co., Houston Oil Co. of Texas, and Sun Oil Co.

AVIATOR

Sections 53, 58, 54, Los Ojuelos grant, 4 mi s Mirando City. **Discovery Well:** Aviator Oil Co.'s Puig Bros. 1, May 28, 1922, 25,000,-000 cu ft gas spraying 21 gr oil, total depth 1586 ft, sand 1578-86 ft, elev 865 ft. **Means of Discovery:** Trend play, geological information. **Type Structure:** Sand lensing structure, faulting at n end of structure. **Producing Formation, Depth and Gravity:** Mirando sand in Jackson zone, 1575 ft, 21 gr. **Producing Area:** 1280 acres, 980 acres oil. **Extent of Development To Jan. 1, 1937:** 236 wells, 198 oil, 18 gas, 20 failures. First 6 months, 1937: 1 failure. **Deepest Test:** Simms Oil Co.'s A. M. Bruni 1, to 3975 ft, plugged back and completed as gasser in 1500 ft sand. **Estimated Ultimate Recovery:** 6,550,000 bbls. **Production Through 1936:** 5,534,432 bbls. **Indicated Remaining Reserve:** 993,568 bbls. **Daily Production July 1, 1937:** 350 bbls. **Oil Outlet:** Crown Central Petroleum Corp., Texapata Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** George Buck, Crown Central Petroleum Corp., Magnolia Petroleum Co., C. R. Mayberry, Murchison Oil Co., Staley & Wynne Oil Corp.

CAROLINA-TEXAS

Sections 336, 268, 335 and adjoining sections. **Discovery Well:** Carolina Texas Oil & Gas Co.'s R. O. Barnsley 1, Nov. 19, 1921, 15,000,000 cu ft dry gas, 1280 ft, sand 1270-80 ft, elev 792 ft. **Means of Discovery:** Geological information and trend play. **Type Structure:** Domal type structure, trending ne and sw, 2 separate highs on general structure, sand lensing. **Producing Formation, Depth and Gravity:** Upper Jackson (Fayette), 1280 ft, gas; McElroy, 2000 ft, gas; Cockfield, 2600 ft, 34 gr; Yegua, 3000 ft, 46 gr; Mount Selman (Queen City) 5000 ft, 42.5 gr. **Producing Area:** 1620 acres, 110 acres oil. **Extent of Development to Jan. 1, 1937:** 88 wells, 15 oil, 50 gas, 33 failures. First 6 months, 1937: 1 failure. **Deepest Test:** Holland Reavis' C. H. Webster 1, abnd 5527 ft, Feb. 20, 1936, in Mount Selman. **Estimated Ultimate Recovery:** 275,000 bbls. **Production Through 1936:** 251,384 bbls. **Indicated Remaining Reserve:** 23,616 bbls. **Daily Production July 1, 1937:** 10 bbls. **Oil Outlet:** United Gas System taking gas, oil to local gathering system. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Carson & Co., Foster & Barnsley, The Texas Co., Carolina Texas Oil & Gas Co., C. O. Maddox et al, Tide Water Associated Oil Co., O. W. Killam et al, George Marshall.

* Prospect. †Salt dome, no production. ‡Gas field.

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SAN ANTONIO, TEXAS

COLE GROUP

In Webb and Duval Counties, Sections 323, 319, 26, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 7 and 8. Part Jofesa Cuellar gr, Mariano Arispe gr, centering around Bruni. **Discovery Well:** Cole Petroleum Co.'s Rosa Benavides 4, July 20, 1924, 69,000,000 cu ft gas, 1705 ft, producing horizon 1760-1755 ft. **Means of Discovery:** Geological data, trend play. **Type Structure:** Series of sand lenses on large structure, with series of local highs, sand lenses close on w and dip to e. **Producing Formation, Depth and Gravity:** Frio, 500 ft, gas; Upper Jackson (Cole) gas; McElroy, Jackson age, 2450 ft, gas; Cockfield (O'Hern sand) 2725-2900 ft, 28.5 gr; Yegua, 2950 ft, (at Bruni townsite) gas, 36 gr; Yegua (Bruni sand), 3460 ft, 41.7 gr. **Producing Area:** 12,500 acres, 3480 acres oil. **Extent of Development To Jan 1, 1937:** 521 wells, 263 oil, 155 gas, 103 failures. During 6 months, 1937: 78 wells, 73 oil, 5 failures. **Deepest Test:** Cole Petroleum Co.'s R. Benavides 75, Block 8, section 19, abnd 6394 ft. **Estimated Ultimate Recovery:** 32,500,000 bbls. **Production Through 1936:** 3,906,235 bbls. **Indicated Remaining Reserve:** 28,593,765 bbls. **Daily Production July 1, 1937:** 7204 bbls. **Oil Outlets:** Humble Pipe Line Co., Magnolia Pipe Line Co., Houston Pipe Line Co., Houston Oil Co., Border Gas Line Co., and United Gas System taking gas. **Rigs Running July 1, 1937:** 12. **Principal Leaseholders:** Hamill & Smith, Magnolia Petroleum Co., Millican, Clopton & Reed; Mims Bros., James P. Nash, John J. O'Hern and J. J. Oil Co., John J. O'Hern, H. J. Porter, Otis Phillips, H. M. Reed, Salt Dome Oil Corp., Sun Oil Co., The Texas Co., Peggy-Sue Oil Co., O. W. Killam, Trinity Drillers, American Liberty Oil Co., Peerless Oil & Gas Co., Herman Brown, Tide Water Associated Oil Co., Highland Oil Co., Shell Petroleum Corp., O'Hern and Seacord, C. O. Maddox, Harry Fansler, Texla Oil Co., Allen & Morris, United Production Corp., Humble Oil & Refining Co.

COLE-BRUNI

Centers around point just s of Bruni townsite. **Discovery Well:** United Prod. Co.'s A. M. Bruni Estate 1, June 6, 1934; 60 bbls 41.7 gr oil per day on gas jet, total depth 3417 ft; sand 3410-17 ft, casing pressure 250 lbs; later drilled deeper to 3444 ft, showed salt water, plug back 3439 ft, recompleted 50 bbls per day. **Means of Discovery:** Deeper drilling on proved structure. Geological information indicated favorable area. **Type Structure:** Local domal-type structure on big structure. **Producing Formation, Depth and Gravity:** Lower Yegua, 3400 ft, 41.7 gr. **Producing Area:** 580 acres, 510 acres oil. **Extent of Development To Jan. 1, 1937:** 45 wells, 35 oil, 10 failures. During 6 months, 1937: 21 wells, 13 oil, 8 failures. **Estimated Ultimate Recovery:** 4,250,000 bbls. **Daily Production July 1, 1937:** 1370 bbls. **Rigs Running July 1, 1937:** 7. **Principal Leaseholders:** O. W. Killam, American Liberty Oil Co., Peerless Oil & Gas Co., Herman Brown, Tide Water Associated Oil Co., Highland Oil Co., United Production Corp., Cole Petroleum Corp., Sun Oil Co., Bishop, Daubert & Lipscomb. **Remarks:** This is single sand in Cole field, but treated as a separate field. It is operated as single unit separate from other production in Cole area. For additional information refer to Cole Group.

COLE-O'HERN

Including portions of Mariano Arispe Grant and El Mesquite Grant, about 2 mi s Bruni, in Webb and Duval Counties. **Discovery Well:** O'Hern & Seacord's S. Benavides 2, Jan. 11, 1927, 70,000,000 cu ft gas per day, total depth 2735 ft, sand 2725-35 ft, 28.5 gr oil produced in same sand. **Means of Discovery:** Deeper drilling on proved structure. Geological information indicated favorable area. **Type Structure:** Sand lensing on large domal-type structure. **Producing Formation, Depth and Gravity:** Cockfield or Basal Jackson, 2750-2900 ft, 28.5 gr. **Producing Area:** 3450 acres, 2770 acres oil. **Extent of Development To Jan 1, 1937:** 157 wells, 144 oil, 3 gas, 10 failures. During 6 months, 1937: 68 wells, 60 oil, 8 failures. **Estimated Ultimate Recovery:** 27,700,000 bbls. **Daily Production July 1, 1937:** 5804 bbls. **Rigs Running July 1, 1937:** 5. **Principal Leaseholders:** Hamill & Smith, Magnolia Petroleum Co., Millican, Clopton & Reed, Mims Bros., James P. Nash, John J. O'Hern and J. J. Oil Co., John J. O'Hern, H. J. Porter, Otis Phillips, H. M. Reed, Salt Dome Oil Corp., Sun Oil Co., The Texas Co., Peggy-Sue Oil Co., O. W. Killam. **Remarks:** This is single sand in Cole field, but treated as a separate field. It is operated as single unit separate from other production in Cole area. For additional information refer to Cole Group.

KILLAM

Sections 786, 333 and 1099, 2½ mi ne Oilton. **Discovery Well:** O. W. Killam's Laurell et al 1, April 20, 1937, 150 bbls 22 gr oil per day, sand 2031-35 ft, 6⅝-in casing 2026 ft, elev 870 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lens, similar shore line structure to other pools along Mirando trend. **Producing Formation, Depth and Gravity:** Mirando sand, Jackson age, 2025 ft, 22 gr. **Producing Area:** 180 acres, 140 acres oil. **Extent of Development During 6 Months, 1937:** 16 wells, 11 oil, 2 gas, 3 failures. **Deepest Test:** O. W. Killam's F. Perez 1, abnd 2558 ft June 17, 1937. **Estimated Ultimate Recovery:** 1,120,000 bbls. **Production Through 1936:** None. (New field). **Daily Production July 1, 1937:** 480 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** 4. **Principal Leaseholders:** Humble Oil & Refining Co., C. H. Bailey et al, O. W. Killam, Eugene Mays, Hamill & Smith, Mills Bennett.

LAUREL

Sections 270, 271, 720, 272, 23, 267 and 1100, 2 mi n Oilton. **Discovery Well:** South Texas Oil Co.'s B. Rosenberg 2 (3), June 21, 1932, 150 bbls 49 gravity oil, ⅜-in choke, 2250 ft, sand 2244-50 ft, 6⅝-in casing 2241 ft, elev 775 ft. **Means of Discovery:** Geological information, based mainly on dry holes. **Type Structure:** Several sand lenses broken by little faulting. **Producing Formation, Depth and Gravity:** Frio 350 ft, gas; Jackson (Mirando), 1775 ft, gas; Cockfield, 2250 ft, 49 gravity. **Producing Area:** 580 acres, 260 acres oil. **Extent of Development to Jan. 1, 1937:** 62 wells, 32 oil, 1 gas, 29 failures. First six months 1937: None. **Deepest**

S A T I S F A C T I O N

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Four wells core drilled for this company with Pennington's Signaling Core Barrel.

UNITED STATES
HEAT TREATING COMPANY, INC.
SAN ANTONIO, TEXAS

PENNINGTON'S SIGNALING CORE BARREL

Test: South Texas Oil Co.'s Laurel Bros. 1-A, abnd 3165 ft, Sept. 25, 1936, in Mount Selman. **Estimated Ultimate Recovery:** 780,000 bbls. **Production Through 1936:** 600,449 bbls. **Indicated Remaining Reserve:** 179,550 bbls. **Daily Production July 1, 1937:** 20 bbls. **Oil Outlet:** South Texas Oil Co. to loading rack. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Altholz & Guervotich, South Texas Oil Co., Magnolia Petroleum Co., Cole Petroleum Co.

LEASEHOLDERS

Including Sections 22, 19, 72, 70, 71, 69, 117, 17, 66 and 14, east central section of county. **Discovery Well:** Leaseholders Producing & Refining Corp.'s A. E. Gates 2, Sept. 16, 1922, 70 bbls 22 gravity oil, 1055 ft, sand 1049-55 ft, 6⅝-in casing 1030 ft, elev 569 ft. **Means of Discovery:** Geological information and trend play. **Type Structure:** Small sand lens. **Producing Formation, Depth and Gravity:** Frio, 370 ft, gas; Jackson 1050 ft, 22 gravity. **Producing Area:** 30 acres, 10 acres oil. **Extent of Development to Jan. 1, 1937:** 39 wells, 2 oil, 1 gas, 36, failures. First six months 1937: None. **Deepest Test:** Cintex Pet. Co.'s J. B. Peal 1, abnd 3034 ft April 25, 1927. **Estimated Ultimate Recovery:** 25,000 bbls. **Production Through 1936:** 25,000 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** All oil wells abandoned. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Illinois Pet. Co., Gates Ranch Oil Co.

LOPEZ

In Webb and Duval Counties, Sections 796, 383, 72, 73, 114,113, 112, 111, 110 and 109, 14 mi n Bruni. **Discovery Well:** Mills Bennett's J. Lopez 1, June 24, 1935, 10,000,000 cu ft gas, 60 bbls 22 gravity oil, 5/16-in choke, 760 lbs tubing, 900 lbs casing pressure, total depth 2144 ft, producing horizon 2126-44 ft, perforated 2139-43 ft. **Means of Discovery:** Geological data, several failures had been drilled in area. **Type Structure:** Sand lensing on Monocline. **Producing Formation, Depth and Gravity:** Jackson (Mirando) 2150-2250 ft, 22 gravity. **Producing Area:** 3350 acres. **Extent of Development to Jan. 1, 1937:** 244 wells, 229 oil, 5 gas, 10 failures. During 6 months, 1937: 99 wells, 86 oil, 7 gas, 6 failures. **Deepest Test:** Sierra Oil & Royalty Co.'s A. S. Billings 1-A, survey 113, abnd 3437 ft, March 21, 1937. Formerly completed in sand 2192-2211 ft for 11 barrels hour. **Estimated Ultimate Recovery:** 37,500,000 bbls. **Production Through 1936:** 1,405,943 bbls. **Indicated Remaining Reserve:** 42,394,057 bbls. **Daily Production July 1, 1937:** 8256 bbls. **Oil Outlet:** Magnolia Pipe Line Co., Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** 3. **Principal Leaseholders:** W. C. Billings, Cox & Hamon, Cron, Gracey & Harroun, Gem Oil Co., Humble Oil & Refining Co., Hunter Co., C. H. Lewis, Magnolia Petroleum Co., Mills Bennett Producing Co., Montour Producing Co., Mortimer & Springer, Sierra Oil & Royalty, Superior Oil Co., Valley Osage Oil Co.

MIRANDO CITY

Sections 457, 458, 58, 592, 1101, 54, 55, 460, 461, 2340, 463, 771, 2253, 2168, 462, 2341, 786 s Mirando City. **Discovery Well:** Schott Oil Co.'s E. Garcia 2, Dec. 10, 1921, 50,000,000 cu ft gas, 75 bbls 21.4 gravity oil, 1540 ft, producing horizon 1530-40 ft, elev 776 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Hockleyensis section of Jackson age, 1540 ft, 21.4 gravity; Cockfield, 1935 ft, 45 gravity. **Producing Area:** 2400 acres, 1405 acres oil. **Extent of Development to Jan. 1, 1937:** 362 wells, 277 oil, 17 gas, 68 failures. During 6 months, 1937: None. **Deepest Test:** Magnolia Petroleum Co.'s E. Garcia 1, abandoned. **Estimated Ultimate Recovery:** 9,000,000 bbls. **Production Through 1936:** 8,594,049 bbls. **Indicated Remaining Reserve:** 405,951 bbls. **Daily Production July 1, 1937:** 375 bbls. **Oil Outlet:** Crown Central Petroleum Corp., Texapata Refining Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Crown Central Petroleum Corp., Laredo Oil Co., Sinedo Oil Co., Magnolia Petroleum Co., Muen-Rio Oil Co., Ross Amigos Oil Co., Ross Segundo Oil Co., George Buck.

MOCA

Zapata County Land Survey No. 3, southeastern portion of county, Section 3, 12 mi w Freer. **Discovery Well:** Moca Oil Co.'s (was Milam Drilling Co.) Duval County Ranch Co. 1, Dec. 16, 1932, 100 bbls 21 gravity oil, 909 ft, producing horizon 903-09 ft, elev 499 ft, 6⅝-in casing 902 ft. **Means of Discovery:** Geological information. **Type Structure:** Small sand lens, possibly some faulting. **Producing Formations: Depth and Gravity:** Jackson 900 ft, 21 gravity. **Producing Area:** 80 acres. **Extent of Development to Jan. 1, 1937:** 16 wells, 9 oil, 2 gas, 5 failures. During 6 months, 1937: None. **Deepest Test:** Quintana Petroleum Co.'s Duval County Ranch Co. 2, total depth 2178 ft, plugged back to 900 ft, completed as oil well. **Estimated Ultimate Recovery:** 880,000 bbls. **Production Through 1936:** 596,483 bbls. **Indicated Remaining Reserve:** 283,517 bbls. **Daily Production July 1, 1937:** 380 bbls. **Oil Outlet:** Crude Oil Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Moca Oil Co., Quintana Petroleum Co., Sota Oil Corp, D. R. Seames.

REISER

Centering around Sections 1618, 1617, 597, 295, 1620, 1570, 1571, 602, 1568, 1567, 602, 296, 1914, 1619, 1517, 331, 1248, 1859, nw Aguilares. **Discovery Well:** Producers Oil Co.'s L. Reiser 2, 1909, 3,000,000 cu ft gas, 1010 ft, producing horizon 1001-10 ft. **Means of Discovery:** Unknown. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Jackson series, 400 ft, 16 gravity; 1000 ft, gas. **Producing Area:** 1290 acres, 20 acres oil. **Extent of Development to Jan. 1, 1937:** 72 wells, 3 oil, 15 gas, 54 failures. During 6 months, 1937: None. **Deepest Test:** O. W. Wheatley's S. N. Johnson 1, abnd 3247 ft; had oil sands at 451-63 ft. **Estimated Ultimate Recovery:** 4000 bbls. **Production Through 1936:** 4000 bbls. **Indicated Remaining Reserve:** None. **Daily Production July 1, 1937:** Gas. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** O. W. Killam, South Texas Plains Oil and Gas Co., Producers Oil Co.

WEST COLE

Sections 661, 662, 660, 659, 696, 697, 694, 698, 701, 693,753, 754 and 411, 2 mi nw Bruni townsite. **Discovery Well:** Cole Petroleum Co.'s Rosa Benavides 36, April 12, 1927, 80,000,000 cu ft gas, 2330 ft, producing horizon 2326 ft, elev 790 ft, later wells developed oil production, 21.5 gravity. **Subsequent Discoveries:** Cole Petroleum Co.'s Rosa Benavides 98, block 11, survey 412, Mar. 14, 1937, 25,000,000 cu ft dry gas, ⅛-in choke, tubing pressure 1020 lbs, casing pressure 1020 lbs, through perforations 2900-10 ft, total depth 3416 ft. **Means of Discovery:** Geological information, attempt to extend Cole field to west. **Type Structure:** Sand lensing with oil producing on flanks. **Producing Formation, Depth and Gravity:** Mirando sand, Jackson, 2325 ft, 21.5 gr; Yegua, 2925 ft, gas. **Producing Area:** 1750 acres, 420 acres oil. **Extent of Development to Jan. 1, 1937:** 153 wells, 87 oil, 26 gas, 38 failures. During 6 months, 1937: 3 wells, 1 gas, 2 failures. **Deepest Test:** Cole Petroleum Co.'s Benavides 36, abnd 5525 ft, lost hole, 1927. **Estimated Ultimate Recovery:** 4,000,000 bbls. **Production Through 1936:** 3,130,320 bbls. **Indicated Remaining Reserve:** 869,680 bbls. **Daily Production July 1, 1937:** 500 bbls. **Oil Outlet:** Houston Pipe Line Co. and Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Cole Petroleum Co., French

WILLACY COUNTY

LA SAL VIEJO

San Juan de Carritos Grant, just south La Sal Viejo Lake, northwest portion of county. **Discovery Well:** Shell Petroleum Corp.'s Yturria Land & Cattle Co. 1, Sept. 16, 1936, 12,000,000 cu ft gas and 90 bbls 58 gravity oil daily; 2050 lbs tubing pressure and 2405 lbs casing pressure, total depth 7662 ft, sand 7630-46 ft. 9⅝-in casing 7633 ft; later deepened to 10,286 ft, plugged back and testing. **Means of Discovery:** Geophysical prospect. **Type Structure:** Probably deep seated salt dome. **Producing Formation, Depth and Gravity:** Frio 7660 ft, 58 gravity. **Producing Area:** 20 acres. **Extent of Development to Jan. 1, 1937:** 1 oil well. During 6 months, 1937: None. **Deepest Test:** Discovery. **Estimated Ultimate Recovery:** 200,000 bbls. **Production Through 1936:** 13,220 bbls. **Indicated Remaining Reserve:** 186,780 bbls. **Daily Production July 1, 1937:** None. **Oil Outlets:** Trucks to local market. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Shell Petroleum Corp., Standard Oil Co. of Texas, Magnolia Petroleum Co., Sun Oil Co.

WILLIAMSON COUNTY

BYERSVILLE

Cartwright, White and adjoining surveys, 8 mi se Taylor. **Discovery Well:** Fritz Fuch's Zeischang 1, Oct., 1933, 25 bbls 37 gravity oil, 904 ft, producing horizon 855-904 ft. **Means of Discovery:** Geological information. **Type Structure:** Domal type structure with several fingers off main structure. **Producing Formation, Depth and Gravity:** Serpentine, 900 ft, 37 gravity. **Producing Area:** 250 acres. **Extent of Development to Jan. 1, 1937:** 72 wells, 47 oil, 35 failures. During 6 months, 1937: 10 wells, 7 oil, 3 failures. **Deepest Test:** H. F. Goff et al's Timmerman 1; total depth 2353 ft; abnd in Edwards lime topped at 2270 ft, April 25, 1935. **Estimated Ultimate Recovery:** 1,200,000 bbls. **Production Through 1936:** 366,545 bbls. **Indicated Remaining Reserve:** 833,455 bbls. **Daily Production July 1, 1937:** 280 bbls. **Oil Outlet:** Taylor Refining Co. **Rigs Running July 1, 1937:** 2. **Principal Leaseholders:** B. E. Pierce, Taylor Refining Co., Fritz Fuchs, Ogden & Reed, Hays Gee.

CHAPMAN-ABBOTT

Centering around Simon Miller Survey. **Discovery Well:** E. L. Chapman and G. B. Peterman's J. C. Abbot 1-A, Jan. 8, 1930, 1845 ft, 2½ million cu ft gas, 400 bbls 37.2 gravity oil, producing horizon 1831-45 ft. **Means of Discovery:** Geological information. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** Caprock on serpentine plug, 1850 ft, 37.2 gravity. **Producing Area:** 350 acres. **Extent of Development to Jan. 1, 1937:** 152 wells, 128 oil, 24 failures. During 6 months, 1937: None. **Deepest Test:** Test abandoned in Edwards lime, 3226 ft. **Estimated Ultimate Recovery:** 4,650,000 bbls. **Production Through 1936:** 4,156,357 bbls. **Indicated Remaining Reserve:** 493,643 bbls. **Daily Production July 1, 1937:** 275 bbls. **Oil Outlet:** Lanning-Coffield have gathering system. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** H. H. Coffield, Westbrook Oil Corp., E. L. Chapman et al.

THRALL

Includes J. Bevil, W. Byerby surveys, near Thrall. **Discovery Well:** Fritz Fuchs 1, Feb. 22, 1915; total depth about 950 ft; flowed 50 bbls 36.5 gravity oil per day. **Means of Discovery:** Surface indications. **Type Structure:** Domal type structure. **Producing Formation, Depth and Gravity:** Serpentine and caprock on serpentine, 950 ft, 36.5 gravity. **Producing Area:** 620 acres. **Extent of Development to Jan. 1, 1937:** 222 wells, 192 oil, 30

* Prospect. †Sa't dome, no production. ‡Gas field.

S A T I S F A C T I O N

T E L E G R A M

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SAN ANTONIO, TEXAS

PENNINGTON'S SIGNALING CORE BARREL

failures. During 6 months, 1937: 6 failures. **Deepest Test:** Drilled to 3290 ft, abnd in Trinity. **Estimated Ultimate Recovery:** 2,100,000 bbls. **Production Through 1936:** 1,851,489 bbls. **Indicated Remaining Reserve:** 248,511 bbls. **Daily Production July 1, 1937:** 50 bbls. **Oil Outlet:** Magnolia Petroleum Co., O. R. Robertson. **Rigs Running July 1, 1937.** None. **Principal Leaseholders:** Magnolia Petroleum Co., O. D. Robertson, Fritz Fuchs.

ZAPATA COUNTY

ANDREWS‡

Sections 613, 11, 12, 182, 125, 309, 10 mi s Mirando City, at corner of Webb, Zapata and Jim Hogg counties. **Discovery Well:** Andrews Petroleum Co.'s P. Benavides 1, Mar. 17, 1924, 25,000,000 cu ft gas, total depth 1535 ft, producing horizon 1511-13 ft, elev 723 ft derrick floor. **Means of Discovery:** Trend play. **Type Structure:** Some faulting and lensing. **Producing Formation, Depth and Gravity:** Jackson, 1500 ft, gas. **Producing Area:** 2000 acres. **Extent of Development to Jan. 1, 1937:** 21 wells, 11 gas, 10 failures. During 6 months, 1937: None. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Associated Oil Co., Andrews Petroleum Co., Lowe & Rogers, O. W. Killam, L. O. Gleason.

BLAS URIBE*

Includes Killam Subdivision of Share N-J, Blas Uribe 2561-acre tract in San Ignacio, and Tract "B" 7, E. Ranchito 6723.5-acre tract, both in J. V. Borrego Grant, 12 mi sw Mirando City and extending across the Webb-Zapata County line. **Means of Discovery:** Trend Play and geological information based on subsurface correlations. **Extent of Development:** Approximately 30 wells have been drilled in general area, most of them by O. W. Killam. These areas may be divided into 2 units. The Ranchito tract has developed gas with some oil around 1100 ft, while the Blas Uribe tract has two gassers at 1825-40 ft. The gas volume on these wells is estimated at 30,000,000 cu ft. While these wells are of commercial proportions, the area still is looked upon as an oil prospect and drilling is being continued.

CHARCO REDONDO

Charco Redondo Grant, se part of county. **Discovery Well:** Zapata Oil & Gas Co.'s J. M. Martinez 1, 1913, 25 bbls 17 gravity oil, top sand 165 ft, elev 450 ft. **Means of Discovery:** Unknown. **Type Structure:** Sand lensing on shore-line structure. **Producing Formation, Depth and Gravity:** Frio, 180 ft, 17 gravity; McElroy zone, Jackson age, gas. **Producing Area:** 650 acres, 570 acres oil. **Extent of Development to Jan. 1, 1937:** 356 wells, 324 oil, 3 gas, 29 failures. During 6 months, 1937: 8 wells, 7 oil, 1 failure. **Deepest Test:** 3000-ft test. **Estimated Ultimate Recovery:** 220,000 bbls. **Production Through 1936:** 172,522 bbls. **Indicated Remaining Reserve:** 47,478 bbls. **Daily Production July 1, 1937:** 18 bbls. **Oil Outlet:** Humble Pipe Line Co. **Rigs Running July 1, 1937:** 1. **Principal Leaseholders:** Ferry & Curry, Palm City Co., L. G. Smith, Bob & Richey, R. A. King.

COMITAS

Blocks 3, 4, 5, 7, 8, A. D. Haynes Subdivision, Comitas and Villas grants. **Discovery Well:** Merle Gunby et al's Alice D. Haynes 1, Aug. 29, 1934, 30 bbls 21.4 gravity oil, 6⅝-in choke, 824 ft, producing horizon 814-24 ft, elev 416.7 ft. **Means of Discovery:** Geological information and trend play. **Type Structure:** Sand lensing. **Producing Formation, Depth and Gravity:** Upper Jackson, 800-1000 ft, 21.4 gravity. **Producing Area:** 720 acres, 660 acres oil. **Extent of Development to Jan. 1, 1937:** 125 wells, 114 oil, 1 gas, 7 failures. During 6 months, 1937: 54 wells, 40 oil, 14 failures. **Deepest Test:** Merle Gunby's Alice D. Haynes 3, abnd 3502 ft, Nov. 27, 1934. **Estimated Ultimate Recovery:** 2,750,000 bbls. **Production Through 1936:** 301,163 bbls. **Indicated Remaining Reserve:** 2,448,837 bbls. **Daily Production July 1, 1937:** 1125 bbls. **Oil Outlet:** Magnolia Pipe Line Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** George Buck, H. H. Coffield, Glcrease Oil Co., Magnolia Petroleum Co., Mid-Continent Petroleum Corp., Jas. P. Nash, Trustee, Nordan & Morris, Upchurch & McKay, Valley Osage Oil Co., United Production Co., Clover Oil & Gas Co.

* Prospect. †Salt dome, no production. ‡Gas field.

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ESCOBAS

Las Comitas Grant, Cerrito Blanco Grant, Sec 64, 65, 66, 412, 521. **Discovery Well:** H. Muckelroy Jr.'s (Trevino Oil Co.) Trevino 1, May 26, 1929, 30,000,000 cu ft gas, and spraying 12 bbls 22.1 gravity oil, 1302 ft, sand 1292-1302 ft, elev 521 ft. **Means of Discovery:** Geological information, drilling on flanks of large gas structure. **Type Structure:** Sand lensing structure. Several separate sand beds, apparently some faulting. **Producing Formation, Depth and Gravity:** Jackson series, 1015 ft, gas; 1150-1300 ft, 21 gravity; 1450-1500 ft, 21 gravity. **Producing Area:** 2560 acres, 960 acres oil. **Extent of Development to Jan. 1, 1937:** 414 wells, 324 oil, 15 gas, 75 failures. During 6 months, 1937: 101 wells, 78 oil, 2 gas, 21 failures. **Deepest Test:** S.R.C. Oil Corp.'s E. Trevino 4, block 13, Se: 65, abnd 3500 ft. **Estimated Ultimate Recovery:** 14,500,000 bbls. **Production Through 1936:** 6,208,350 bbls. **Indicated Remaining Reserve:** 8,291,650 bbls. **Daily Production July 1, 1937:** 2400 bbls. **Oil Outlet:** Humble Pipe Line Co., Texas Pipe Line Co. **Rigs Running July 1. 1937:** 7. **Principal Leaseholders:** Allied Oil & Gas Co., Roy Albritton, Earl Calloway, Frank R. Campbell, Cron, Gracey & Harroun, Daubert & Lipscomb, Inc., Dulup Oil Co., Sam Evans, Harry Fansler, G. E. Glasco, O. W. Killam, H. & R. Oil Co., Kleiner & Hill, J. C. McIntyre, W. H. Matthews, B. W. Roscoe, Transwestern Oil Corp., Zapata Corp.

JENNINGS‡

Cerrito Blanco Grant, ne portion of county. **Discovery Well:** Joe D. Jennings' Whitehead et al (Jennings) 1, Mar. 19, 1914, 8,000,000 cu ft gas, 1425 ft, top sand 1410 ft, elev 482 ft. **Means of Discovery:** Little information, likely result of showings in water wells. **Type Structure:** Large domal-type structure with axis almost due north and south, several sand lenses. **Producing Formation, Depth and Gravity:** Jackson series, 900 ft, 1400 and 1950 ft, gas. **Producing Area:** 2000 acres. **Extent of Development to Jan. 1, 1937:** 35 wells, 12 gas, 23 failures. During 6 months, 1937: None. **Deepest Test:** The Texas Co.'s Whitehead 2 (Jennings) Cerrito Blanco, abnd 4645 ft July 15, 1926, had sand 3991-96 and 4181-83 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** The Texas Co., United Prod. Corp.

LOPENO‡

Share 20, Porcion 19, e Lopeno. **Discovery Well:** R. B. Morrison's V. & R. Ramirez 1, (Los Burros Ranch), July 10, 1934, 20,000,000 cu ft gas, 2170 ft, 7-in casing 2040 ft, lime 2040-41 ft, sand 2040-64 ft, shale 2064-69 ft, sand 2069-86 ft streaky shale and lime 2086-2122 ft, shale 2122-47 ft, sand 2147-70 ft. **Means of Discovery:** Geological information and geophysical work. **Type Structure:** Anticlinal structure with two individual highs. **Producing Formation, Depth and Gravity:** Queen City sand in Mount Selman, 2000-2300 ft, gas. **Producing Area:** 850 acres. **Extent of Development to Jan. 1, 1937:** 11 wells, 10 gas, 1 failure. During 6 months, 1937: 4 wells, 2 gas, 2 failures. **Deepest Test:** Gem Oil Co.'s J. G. Ramirez 1, total depth 3502 ft, plugged back 2152 ft, casing perforated 2134-52 ft, completed July 12, 1935, 10,000,000 cu ft gas, 925 lbs rock pressure. **Daily Production July 1, 1937:** Gas. **Outlet:** Connection to United Gas System, Monterrey lines. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** R. B. Morrison, Jamison et al, Thor Warner, Harry Keefe, Nordan and Morris, Wellington Oil Co., Gem Oil Co., Venture Petroleum Co., Ahlen Brother, Dalport Oil Co., Wm. H. Winn.

MARTINEZ‡

Sections 2, 6, 61, 4, 285, 411, 13 ,162, 161, 286, 19, 63, eastern portion of county. **Discovery Well:** Magnolia Petroleum Co.'s F. G. Martinez 1, Aug. 16, 1929, 30,000,000 cu ft gas, 620 lbs rock pressure, total depth 1927 ft, sand 1921-27 ft, elev 693 ft. **Means of Discovery:** Geological information. **Type Structure:** Sand lensing structure. **Producing Formation:** Hockleyensis, section of Jackson series, 1920 ft, gas. **Producing Area:** 850 acres. **Extent of Development to Jan. 1, 1937:** 34 wells, 20 gas, 14 failures. During 6 months, 1937: 1 failure. **Deepest Test:** Sylvan Price, Maryland Trust Estate 1-C, Block 15, Survey 314, abnd 3514 ft, May 10, 1937. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Henne & Winch, O. W. Killam, Shankle et al, Magnolia Petroleum Co., Newton et al, United Prod. Corp., Sylvan Price.

MIRANDO VALLEY

Sections 116, 182, 76, 251, 10, 307, 114, 112, 113, 253, 18, 240, 613, 11, 9, 125, 307, 249, 126, 836, and part of Albercas Grant. **Discovery Well:** Mirando Oil Co.'s (O. W. Killam) R. Hinnant 3, Apr. 17, 1921, 40 bbls 21 gravity oil, 1423 ft, sand 1416-23 ft, elev 707 ft. **Means of Discovery:** Unknown, possible geological information and surface indications. **Type Structure:** Sand lensing situation. **Producing Formation, Depth and Gravity:** Hockleyensis section of Jackson series, 1425 ft, 21 gravity. **Producing Area:** 380 acres, 140 acres oil. **Extent of Development to Jan. 1, 1937:** 120 wells, 30 oil, 19 gas, 71 failures. During 6 months, 1937: None. **Deepest Test:** O. W. Killam's R. Hinnant 4, Sec 76, Block 11, abnd 2946 ft. **Estimated Ultimate Recovery:** 675,000 bbls. **Production Through 1936:** 633,508 bbls. **Indicated Remaining Reserve:** 41,492 bbls. **Daily Production July 1, 1937:** 26 bbls. **Oil Outlet:** Texapata Refining Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** O. W. Killam, Magnolia Petroleum Co. Wells originally drilled by number of companies, but practically all production has been acquired by these operators.

PAPPAS*

Extreme southwest end of Porciones 33 and 34, one mile southeast of Zapata. **Means of Discovery:** Surface and subsurface information. **Extent of Development:** 6 wells have been drilled, 1 resulting in a gasser. John Pappas' Cuellar 1, June 21, 1929, as a small gasser at 1408 ft, possibly in the Cook Mountain.

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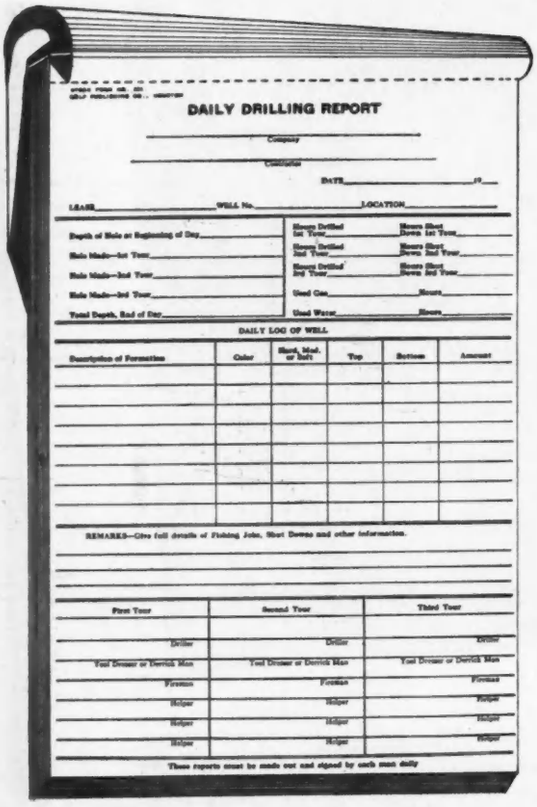

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CUELLAR

Cerrito Blanco Grant, Sec 245, ne Jennings gas field. **Discovery Well:** Magnolia Petroleum Co.'s E. Cuellar 3, Feb. 14, 1927, 3,000,000 cu ft gas, spraying 22 gravity oil, 1350 ft, sand 1340-50 ft, elev 551 ft. **Subsequent Discoveries:** Magnolia Petroleum Co.'s Gonzalez-Cuellar 1, Cerrito Blanco Gr, 1 mi w Cuellar field, April 1, 1937, for 8,000,000 cu ft gas daily 385 lbs pressure on tubing ⅝-in choke, sand 1100-1116 ft, total depth 1116 ft, 7-in casing 1100 ft. **Means of Discovery:** Geological information, trend play. **Type Structure:** Small sand lens. **Producing Formation, Depth and Gravity:** Upper Jackson series, 1100 ft, gas; 1350 ft, 22 gravity. **Producing Area:** 560 acres, 340 acres oil. **Extent of Development to Jan. 1, 1937:** 111 wells, 77 oil, 6 gas, 28 failures. During 6 months, 1937: 7 wells, 3 gas, 4 failures. **Deepest Test:** Magnolia Petroleum Co.'s R. Cuellar 1, Sec 278, abnd 3040 ft. **Estimated Ultimate Recovery:** 2,750,000 bbls. **Production Through 1936:** 2,446,995 bbls. **Indicated Remaining Reserve:** 303,005 bbls. **Daily Production July 1, 1937:** 230 bbls. **Oil Outlet:** Texapata Refining Co. **Rigs Running July 1, 1937.** None. **Principal Leaseholders:** O. W. Killam, Magnolia Petroleum Co., Trapshooter Reilly, Brooklyn Oil Co.

VILLA‡

Villa Grant and several sections n and ne, ne portion of county. **Discovery Well:** Winch & Billings' S. Benavides 1, Oct. 24, 1932, 15,000,000 cu ft gas, 1673 ft, 375 lbs rock pressure, sand 1657-64 ft, elev 672 ft. **Means of Discovery:** Geological information and trend play. **Type Structure:** Sand lensing situation, shore-line structure like remainder of Mirando district. **Producing Formation, Depth and Gravity:** McElroy zone of Jackson, 1675 ft, gas. **Producing Area:** 120 acres. **Extent of Development to Jan. 1, 1937:** 6 wells, 3 gas, 3 failures. During 6 months, 1937: None. **Deepest Test:** To Cook Mountain at 3000 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** United Gas System. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Winch & Billings, French Oil Corp., J. J. O'Hern, Danvers & Harrison, The Texas Co., Mid-Continent Petroleum Corp., Magnolia Petroleum Co., Harry Fansler.

WRAY‡

Centering around share 9, Fullerton subd, Borrego Gr in northwestern portion of county. **Discovery Well:** Arthur H. Wray's Gopher Trust Estate 1, June 22, 1933, 5,000,000 cu ft gas, 348-70 ft in Jackson, elev 498 ft; 150 lbs rock pressure. **Means of Discovery:** Geological information. **Type Structure:** Sand lens. **Producing Formation:** Jackson, 370 ft, gas. **Producing Area:** 80 acres. **Extent of Development to Jan. 1, 1937:** 6 wells, 3 gas, 3 failures. During 6 months, 1937: 1 failure. **Deepest Test:** 2000-ft gasser. **Daily Production July 1, 1937:** Gas, no outlet. **Rigs Running July 1, 1937:** None. **Principal Leaseholder:** Arthur Wray. **Remarks:** About 60 acres have been proved with 2 gassers in this sand, but no oil wells have been developed. Several wells drilling to 2000 ft.

ZAVALLA COUNTY

BATESVILLE

Sec 11 Blk A-2, GW&T RR sur, 6 mi ne Batesville. **Discovery Well:** Wilcox Oil & Gas Co.'s T. J. Gilliam 1, May 29, 1937, 210 bbls hour through 6-in flow line, Edwards limestone 3941-47 ft, 7-in casing 3030 ft. **Means of Discovery:** Geological information. **Type Structure:** Faulting present, no definite information available. **Producing Formation, Depth and Gravity:** Edwards limestone, 3950 ft, 16.6 gravity. **Producing Area:** 20 acres. **Extent of Development:** First 6 months 1937, 1 oil well. **Deepest Test:** Discovery well. **Estimated Ultimate Recovery:** 500,000 bbls. **Indicated Remaining Reserve:** 500,000 bbls. **Daily Production July 1, 1937:** 100 bbls. **Oil Outlet:** Trucks. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Wilcox Oil & Gas Co., Holland Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Benedum & Trees Oil Co. **Remarks:** This field is definitely an unknown quantity, but several million dollars worth of leases were acquired after discovery well completed. Edwards limestone is a very important producing level in South Texas and potentialities of this district can be assumed to be large.

COW HILL‡

A. Aguirre, Emily King, George Boss surveys, 10 mi ne from La Pryor. **Discovery Well:** Discovered in 1928 by 800-ft gasser on Ike Pryor ranch. **Means of Discovery:** Surface indications, and subsequent drilling on subsurface information. **Type Structure:** Faulting with some sand lensing. **Producing Formation, Depth and Gravity:** Escondido, 800 ft, gas; 1200 ft, 20 gravity. **Producing Area:** 200 acres. **Extent of Development to Jan. 1, 1937:** 18 wells completed, 1 oil, 7 gas, 10 failures. During 6 months, 1937: No wells completed. **Deepest Test:** Sun Oil Co.'s Pryor-West 2, abnd 3340 ft. **Daily Production July 1, 1937:** Gas. **Outlet:** Texas Gas Utilities Co. **Rigs Running July 1, 1937:** None. **Principal Leaseholders:** Texas Gas Utilities, although several other operators hold interests in block.

CRYSTAL CITY*

Centering an area southeast of AB & M sur, Sec 43, 10 mi ne Crystal City. **Means of Discovery:** Geological and geophysical work done on block, also in trend with Pearsall and Doering fields. **Extent of Development:** Bay Oil Corp.'s National Bank of Commerce 1 abnd Aug. 1, 1936, 7082 ft, showing sulphur water in Edwards lime topped at 6860 ft. Well topped Austin chalk at 5717 ft, set casing at 5724 ft and showed slight saturation at various points to 6200 ft. Drilled to 6585 ft, plugged back to 6250 ft, acidized but showed insufficient oil to make a producer, then drilled to total depth where it was abnd. This well considered to be on northwest side of structure.

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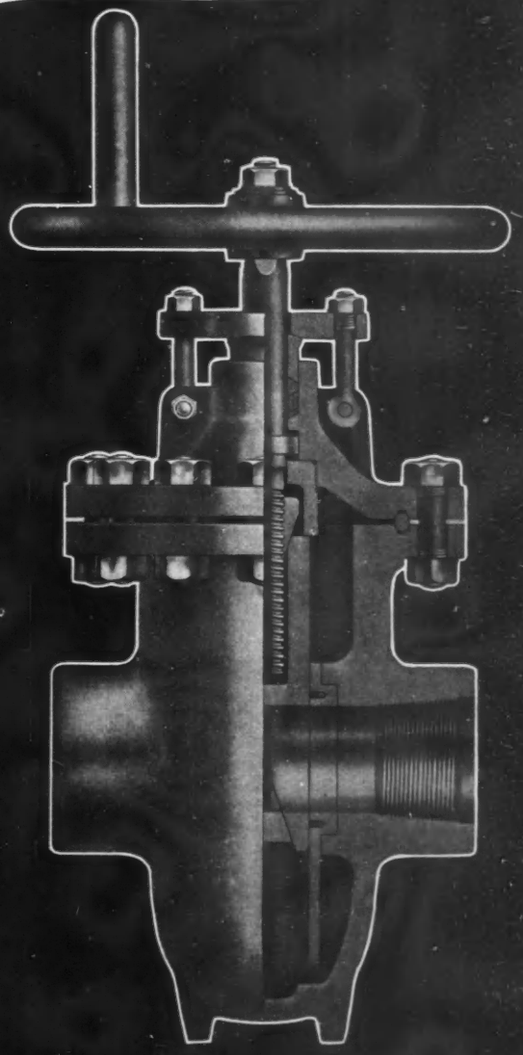

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Watch Millarville

TEST 16 MILES FROM TURNER VALLEY FLANK RUNNING HIGH

RICHLAND OIL COMPANY'S No. 3 was added to the steadily growing list of major producers in the Turner Valley field of Alberta, Canada, last week with completion at 6047 feet, 440 feet in the Madison limestone. A production test is in progress, officials meanwhile estimating the daily yield to be 500 barrels. Location is Legal Subdivision 14, Section 28, Township 18, 2-w5.

The well holds the distinction of being the largest oil well brought into production with cable tool equipment in Canada, and probably in the British Empire. Gas flow carried the oil high in the derrick as the well reached the completion stage. Roy Widney, veteran Turner Valley driller, had charge of drilling operations. The crew is to take over the company's No. 1 well, located directly between the B. and B. Royalties' and Turner Valley Royalties' large producers, which has been shut down for repairs at 3050 feet. Drilling was to resume this week.

Tops Blairmore High

Most interesting Turner Valley development of the week was at Home Oil Company's Millarville, Legal Subdivision 8, Section 33, Township 20, 3-w5, which encountered the top of the Blairmore formation at 3800 feet, approximately 1000 feet shallower than the average crude producer in the southwest flank 16 miles from the Millarville well. Drilling was at 4150 feet at the week closed.

Mercury Oils No. 8, Legal Subdivision 3, Section 4, Township 19, 2-w5, is now the Turner Valley well nearest completion. Standing with casing run and cemented at 5560 feet, 34 feet in the Madison limestone, it was to resume drilling this week. The lime was encountered 700 feet shallower than expected, making estimates on when the porous section of the formation should be encountered difficult.

Davies Petroleum No. 2 entered the lime formation during the week at 6496 feet and was carried to 6533 feet before drilling stopped. The drill pipe was being pulled and 6-inch casing was to be run and cemented.

Spy Hill Royalties 1, in South Turner Valley, was believed to have set a drilling record for cable tools in Canada. Spudded in on July 12, it made 1970 feet of 16-inch hole the first 30 days. It was drilling below 2435 feet as the work closed.

Moose Oils No. 2, which proved Moose Dome, 40 miles west of Calgary, an important new field when production of 100 barrels was obtained from the shallow depth of 1553 feet, is to be given acid treatment. There has been some delay in obtaining tubing for the treatment, but it is reported that a supply is now on the way from Montana. The question of whether the well will be carried deeper or completed at its present level will be decided following acidization. Meanwhile, a second 500-barrel storage tank has been installed at the well.

Plan Another Moose Dome Well

First announcement concerning additional development on Moose Dome since Moose Oils No. 2 strike a week ago came from W. C. Fisher, managing director of Model Oils, Ltd., who said his company was considering a test on the structure. Model Oils holds 2000 acres in this area.

Benefit of the intensive development during the past year in the Turner Valley to the Alberta provincial government is approximately $2000 a day, a survey made last week reveals. The figure is based on current production from wells on government land, of which 10 percent royalty goes to the government.

In Calgary last week, R. H. Breckon, president of Vera Oilfields, Ltd., announced the company's No. 2 well at Vera, Saskatchewan, just east of the Inter-Provincial boundary, is at 1740 feet where it was preparing to run 6-inch casing. The test is now in the Blairmore, caving difficulties in the Bentons having been overcome. An estimated million cubic feet of gas is coming from the upper producing horizon in which a big flow was encountered at No. 1 as well. No. 1 is in the top of the Devonian at 2140 feet and has a gas flow estimated at 2,000,000 cubic feet per day. No water has been encountered at any stage.

Following is the status at other Turner Valley wells as the week closed: Brown Oil Corporation's No. 1, drilling at 6216 feet; No. 2, drilling at 6311 feet; No. 3, drilling at 3445 feet; Command Oils, waiting casing at 810 feet; Commoil, drilling at 6450 feet; Davies Petroleum's No. 1, drilling at 3470 feet; Firestone Petroleum's No. 1, drilling at 4985 feet; Four Star Petroleum's, drilling at 5615 feet; Globe Royalties', drilling at 1535 feet; Granville Oils', drilling at 6468 feet; Mercury Royalties' No. 1, fishing at 5121 feet; Model-Spooner-Reward Royalties, drilling at 6000 feet; National Petroleum Corporation's No. 1, drilling at 5915 feet; No. 2, waiting at 3005 feet; Okalta Oils, drilling at 750 feet; Phillips Petroleums, drilling at 3850 feet; Prairie Royalties, drilling at 6150 feet; Richland Oil Company's No. 2, casing at 5200 feet; Rich-Well Oil Company, drilling at 1703 feet; Royal Crest Petroleums, drilling at 5830 feet; Royal Canadian Oils' No. 1, drilling at 3310 feet; Royalite Oil Company's Sterling-Pacific No. 6, drilling at 3413 feet; Share Royalties, drilling at 6325 feet; Spy Hill Royalties, drilling at 2435 feet; Sunburst Oil Company, waiting drill pipe at 2610 feet; Sunset Oils, drilling at 3544 feet; Three Point Petroleums, drilling at 5200 feet; Vulcan Oils-Brown, drilling at 2235 feet; West Crest Petroleums' No. 1, idle at 4300 feet; West Flank Oil Company's No. 1, drilling at 3992 feet; No. 2, drilling at 2757 feet; No. 3, drilling at 1190 feet; West Turner Petroleum's No. 1, drilling at 500 feet; No. 2, rigged up.

Other Areas

Reports from other West Canadian structures follow: On Birch Ridge, Elbow Oils Company, drilling at 5171 feet; on Calling Valley, Anglo-Indian Oils Corporation, building derrick; Sentinel Oils, resuming at 5850 feet, on Cardston, Franco Oils, drilling at 3804 feet; on Clearwater, Western Development Company, drilling at 122 feet; on Coutts, Home Oil Company's Coutts No. 1, drilling at 1100 feet; on Duncan, Spindletop Oils, drilling at 1500 feet; on High River-Aldersyde, Ranchmen's Gas & Oil Company, drilling at 7225 feet; on Highwood-Sinclair Green Valley Petroleum's Banner, drilling at 3055 feet; South End Petroleums, drilling at 5225 feet; on Hunter Valley, Hunter Valley Oil Company, drilling at 8094 feet; on Kootenay Dome, Roxana Petroleums, drilling at 3164 feet; on Lethbridge, Lethbridge Petroleums,

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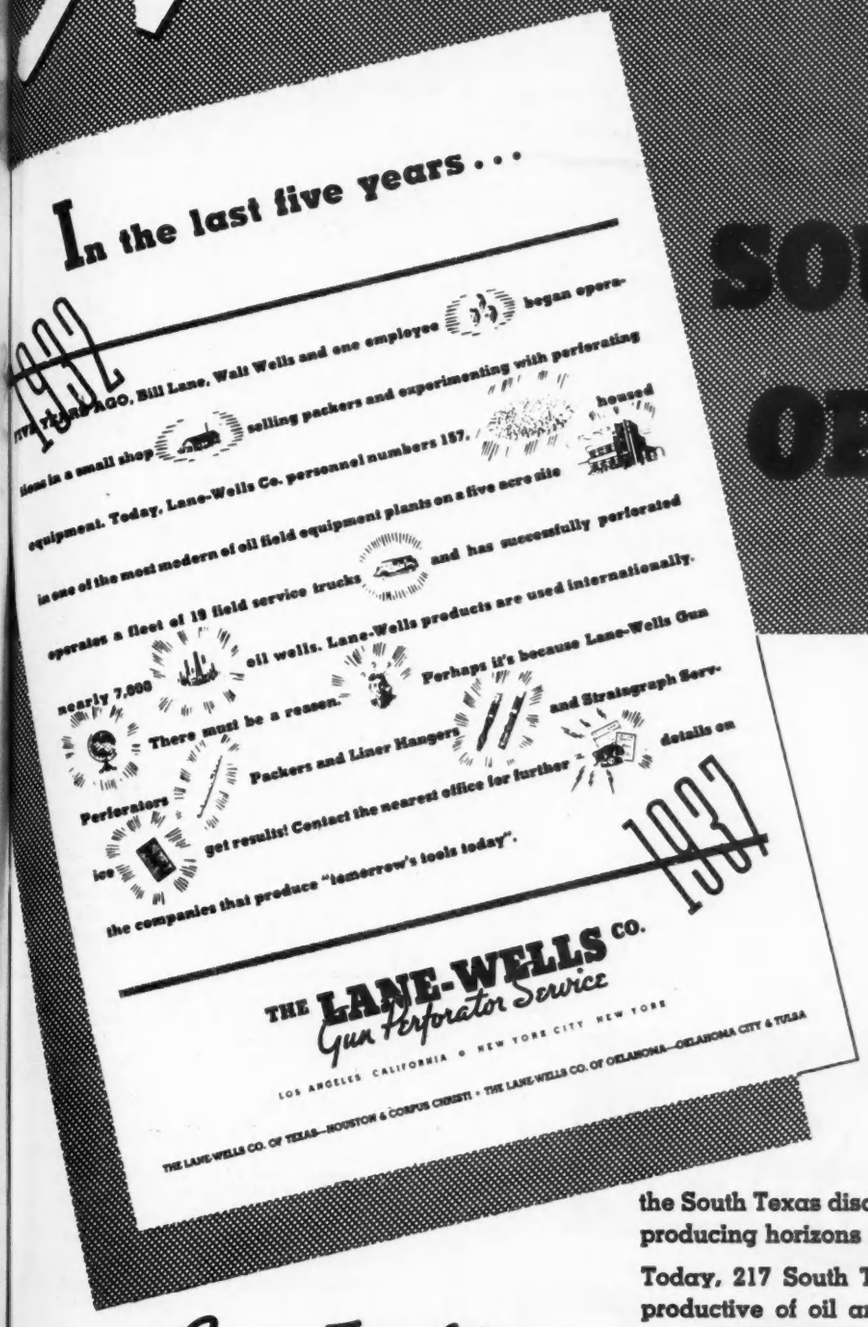
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drilling at 2245 feet; on New Valley, New Valley Oil Company, drilling at 8460 feet; on Pincher Creek, Weymarn Petroleums, giving acid treatment at 6412 feet; on Ribstone, Dina Oil & Refining Company's No. 4, drilling at 400 feet; London Ribstone Petroleums, testing with no depth reported; on Steveville, Anaconda Oil Company, drilling at 615 feet; on Taber, Plains Petroleum Corporation's No. 2, drilling at 2360 feet; No. 3, drilling at 1810 feet; on Wainwright, Altoba Oils, building derrick; Battleview Oils, cemented at 1894 feet; on Watson, Mar Jon Oil Company's No. 3, drilling at 5520 feet; Mar Jon-Maxmont Syndicate, drilling with no depth reported.

Registration in Alberta has been made by two oil companies with head offices in Vancouver: British Pacific Oils, which is capitalized in 3,000,000 shares, has named Ronald Martland, Edmonton, its representative. C.-C. Petroleums, with capital of 3,500,000 shares, has named Henry Goodall, Calgary, its representative.

CANADA

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
TURNER VALLEY—		
Richland Oil Company's No. 3, L. S. D. 14, 28-18-2-w5	500	6047

*Failures; †Junked; ¶Million cu. ft. gas.

Big Concessions

AFGHANISTAN AND IRAN GRANTS TOTAL 430,000 SQUARE MILES

ALTHOUGH much appeared in the daily press and certain news magazines several months ago relative to granting of large oil concessions to Amiranian Oil Company in Iran and to Inland Exploration Company in Afghanistan, all parties connected with the said companies have up to the present time been reticent as to details. Although press items have been substantially correct, some slight discrepancies occurred. It is now possible to give the essential background and present status of these new Asiatic ventures.

Who's Who

Stockholders in the two above-mentioned companies are Seaboard Oil Co. of Delaware, Case, Pomeroy & Co., Inc., Ogden L. Mills, Frederick G. Clapp and John M. Lovejoy. The officers of both companies are John M. Lovejoy, president; B. H. Faulkner, secretary-treasurer, Frederick G. Clapp, Nelson Dickerman and Charles C. Hart, vice presidents. The business office is located adjoining that of Seaboard Oil Company at 39 Broadway, New York City.

The present ventures have been under consideration and negotiation for several years. At the beginning of 1934, Frederick G. Clapp, well known consulting geologist, and the Honorable Charles C. Hart, popular newspaper man and formerly American minister to Albania and Iran, went to Teheran to commence discussions with the Iranian government. These conferences were subsequently suspended.

Negotiators

During this interval and at the invitation of the Royal Afghan government, Hart proceeded to Kabul and commenced discussions, late in 1935. Clapp joined him in the spring of 1936, and negotiations were carried on from step to step in the face of intensive competition. An oil concession in favor of Inland Exploration Company was signed November 19 of that year, His Excellency Faiz Mohammed Khan, foreign minister, acting as principal government representative and signator. Other persons who participated on the Afghan side were His Excellency Mirza Mohammed Khan, minister of trade, and Abdur Mehjid Khan, president of the Afghan National Bank. Throughout all of the discussions His Royal Highness Sardar Mohammed Hashim Khan, prime minister, maintained a general supervision with an ability and friendliness greatly admired by all.

Pipe Line Permit

Hart and Clapp then returned to Iran to resume negotiations with the Imperial Iranian government which was represented by the late Mirza Ali Akbar Davar, minister of finance, who acted with the advice and consent of inner government circles on all important points.

An oil concession in favor of Amiranian Oil Company was finally signed January 3, 1937, by His Highness Mirza Mahmud Djam, prime minister, and the finance minister, representing the government, with Clapp and Hart representing the company. Simultaneously the Iranian Pipe Line Company, sponsored by the above-mentioned corporation, received the right to build a pipe line to any mutually satisfactory point on tidewater for transporting both Iranian and Afghan oil. It is contemplated that a port and refineries will ultimately be constructed at some point on the coast to be selected by the company's engineers.

A Kingdom for a Concession

Inland Exploration Company became the owner of oil rights in the entire Kingdom of Afghanistan covering approximately 240,000 square miles, with the obligation to select five provinces during a period of time and permission to operate for the duration of the concession of 60 years. Amiranian Oil Company received a concession on approximately 190,000 square miles in eastern and northern Iran from which a selection of not exceeding 100,000 square miles of territory must be made in due course.

Work Already Started

No time has been lost in commencing the intensive exploration work necessary to decide upon the most promising drilling sites. Geological parties have now been in Iran several months and work is progressing satisfactorily. The first three parties bound for Afghanistan left New York August 5 for Karachi (India), whence they will proceed by train to Peshawar and then motor through the Khyber Pass and Hindu Kush Mountains to commence work in northern Afghanistan during

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the several months which remain before the winter season.

Clapp In Charge

In order that operations may proceed with due regard to known geology, topography and means of access, and to capitalize upon Clapp's knowledge of the area, all explorations in both countries have been placed in his charge. He has previously conducted similar work in many countries. Since the concessions do not require commencement of wells for about two years, there is sufficient time to do considerable geological work before deciding upon sites for the initial drilling operations.

The companies recognize the world significance of their work and are laying extensive plans to accomplish this major task of bringing oil from Afghanistan and northeastern Iran to world markets in the shortest possible time.

TOO OPTIMISTIC

Hungarian wells will not supply 15 percent needs

Contrary to reports, it is doubtful if recent petroleum strikes in Hungary will supply 15 percent of the nation's needs as they were given credit for being able to do.

Upon receiving reports of the discovery of oil at Lispe and in the Bukk Hills region of Hungary, THE OIL WEEKLY contacted a reliable source in Budapest, receiving August 20 a letter which reads in part as follows:

"The oil producing area exploited by the Hungarian government is in the Bukk Hills, in the vicinity of Bukkszek, a short distance west of Eger and not far from the Czechoslovakian border. The operations are conducted by the Hungarian ministry of industry, and no private capital is involved. Official statistics concerning operations and production are not available. According to reports . . . 10 wells have been drilled in this area and the eleventh has been started. Production (recently) was reported to be from one to 1.5 carloads daily from four of these wells.

Production Exaggerated

"It is reported that a well is being drilled at Recsk on a ridge overlying a copper mine. Exaggerated production estimates have appeared from time to time, and the original report—that these wells would be capable of producing 15 percent of Hungary's requirements—is believed to be decidedly optimistic. The production area is known to be small, and little hope of any great production is held. The formation of the earth (in this neighborhood) has been shattered by mountain movements and distortion of the underlying strata, the oil being found in fissures in volcanic ash formation. Production of individual wells fluctuates greatly. Wells which have produced 100 barrels in one day have been known to drop to 20 barrels within a few days time. Deepening the wells to lower fissures has sometimes restored production, but results are uncertain, and it is believed probable that more money has been spent on development than will ever be recovered.

"The oil now being produced in the government fields is being taken by the Fanto refinery, a private concern formerly controlled by Dutch capital but recently taken over by a local Hungarian group.

One Private Operator

"European Gas & Electric Company, an affiliate of Standard Oil Company of New Jersey, is the only private concern engaged in developing oil fields in Hungary. This company works under a concession from the government and is operating in two districts: one near Kapuvar (Mihaly), about 140 kilometers west of Budapest, and one between Inky (Iharosbereny) and Lispe (Budafapouszta), about 200 kilometers southwest of Budapest and near the Yugoslavakian border."

Producing wells and current drilling operations in Hungary, according to the letter, are given below:

"Kapuvar district: Mihaly 1, 1600 meters deep, is a carbon dioxide producer, output from which is being used for preservation of Hungarian fruits; Mihaly 2 is drilling on a location six kilometers north of No. 1 at 1150 meters with an objective depth of 2000 or 2500 meters.

Lispe district: Lispe 1, near Budafapuszta, is producing 20 million cubic feet of gas and 10 barrels of oil per day from 1080 meters; Lispe 2, using gas from No. 1, is drilling at 1487 meters on a structure where prospects are said to be favorable.

Iharosbereny district: The Inke well is producing five million cubic feet of carbon dioxide and methane from 1360 meters."

DRILLING IS UP

43 Mexican permits, mostly to foreign firms

Mexican drilling operations have taken a spurt that has something of a near boom aspect with the government modifying its policy regarding this phase of the oil business which suspended drillings for about a year. Permits to drill 43 wells were granted to companies and individuals by the ministry of national economy from July 1 to August 19.

Most of the permits were allowed such foreign enterprises as the Mexican Eagle Oil Company (Royal Dutch Shell group), Southern Fuel & Refining, New England Fuel Oil, Gulf Coast, Mexican Sinclair and American International Fuel & Petroleum. Two permits were allowed the government's new oil enterprise, General Administration of National Petroleum. The majority of the new wells are to be drilled in central and southern Vera Cruz State.

The permits are as follows:

Vera Cruz State—Mexican Eagle: El Burro 58, El Plan 63, 64 and 65, and San Jose 6, 7 and 8 in the Puerto Mexico sector, and Corcovado 44 in the Panuco zone. Mexican Petroleum (of the Eagle group): Rincon 23 and 24, Chijol 133 and 134, and Camino 12, Panuco. P. J. Jonker, S. en C. (an Eagle subsidiary): Cacalilao 236 and 237, Cacalilao sector.

Richmond Petroleum: Cuichapa 8 and 9, Moloacan region. General Administration of National Petroleum: Petronac 1 and 2, Poza Rica area. Southern Fuel & Refining: Cacalilao 366, 367, 368 and 369, Cacalilao. Inversiones Aztlan, S. A.: Amatlan 11 and 12, Amatlan zone. Liquidating committee for Petromex: 44, federal zone, Panuco. Gulf Coast Corporation: Cacalilao 364 and 365, Cacalilao. Mexican Sinclair: Gonzalez 15 and 16, Panuco. Carlos Guzman Willis: Sanchez Navarro 2, Panuco. International Petroleum: Sabalo 34, Panuco. New England Fuel Oil: Pazzi 38, Panuco. Stanford & Company: Ojital 2, Papantla zone. Metlac Petroleum: Vila 1, Puerto Mexico sector.

Tamaulipas State: American International Fuel & Petroleum: Altamira 103, 104, 105, 106, 107 and 108, Altamira zone. Hamilton & Devine, S. en C.: Mata del Muerte 10 and 11 on Mata del Muerte island, Champayon lagoon, Altamira.

COMPLETES TWO

Mexico's new federal firm off to good start

General Administration of National Petroleum, which the federal government of Mexico organized to engage in all branches of the oil industry, got off to a good start with drilling by accounting for the only two producers of the three completions in July in Mexico. These wells were taken over from the defunct Petromex. They are: Petromex 2, federal zone, Las Choapas division, Minatitlan municipality, Vera Cruz State, starting production with 252 barrels a day at 2045 feet, and Petromex 37, in the Panuco federal zone, which commenced with 63 barrels daily at 2135 feet.

Cacalilao fields, Vera Cruz state, comprising one of Mexico's greatest producing districts, are still much in the running, it is demonstrated by the report of the ministry of national economy that Kern Mexico Oil Fields has brought in La Palma 53. The well began production with 73 barrels daily at a depth of 1650 feet.

PRODUCTION UP

Something approaching complete recovery from the setback of the general strike in Mexico was scored by oil production in July, it is indicated by the 3,848,594-barrel production for that month, according to estimates of the ministry of national economy. That output compares with the ministry's rectified figures for a June production of 3,338,311 barrels and the July, 1936, production of 3,179,614 barrels.

MEXICO

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Gen. Admin. Nat. Petroleum, Petromex 37 Fed. Zone, Panuco.....	63	2135
Gen. Admin. Nat. Petroleum, Petromex 2 Fed. Zone, Minatitlan.....	252	2045
Globe Petroleum, Globe 16, Tampico Alto	*	3034

*Failures; †Junked; ¶Million cu. ft. gas.

MEN IN THE INDUSTRY'S NEWS

FREDERICK G. CLAPP, vice president of Amiranian Oil Company and Inland Exploration Company, sailed on the Exochorda from New York August 17, to take charge of exploration developments in Iran and Afghanistan. Dr. Clapp's family accompanied him, and they will motor from Beirut across Syria and Iraq into Iran. Mrs. Clapp and Miss Clapp will visit some of Iran's archaelogical wonders while geological work is progressing in the north and east where Amiranian Oil Company has a large concession. They will later join Dr. Clapp in Afghanistan after he has visited several field parties operating in the north and west of that country.

H. Gardner Clapp also left on the same boat to take a position with the above mentioned companies, and will spend two years in Iran and Afghanistan.

J. W. WOOD of Wood-Callahan Oil Company, Ltd., Long Beach, California, arrived in Worland, Wyoming last week where he met **R. H. HUME,** manager of operations for the same company on its test of the Paint Rock structure in Washakie County, Wyoming. Wood plans to be on location while the well is drilling in and testing the principal objective, the Madison lime.

RALPH WILLS, formerly general superintendent for Rocky Mountain Company, recently has become connected with Anglo-Canadian Development Company, Ltd., Calgary, Alberta, Canada, as superintendent of operations.

J. E. FARRELL, president of Farrell & Company, Fort Worth, and co-discoverer of the north portion of the East Texas field, has purchased and donated an "iron lung" to the Fort Worth City-County hospital.

G. D. THOMAS, district geologist for Shell Petroleum Corporation at Shreveport, has returned from a vacation spent in Colorado.

E. T. OAKES, Shreveport independent operator, who discovered the Lisbon, Louisiana, field, is spending a vacation at Battle Creek, Michigan.

R. OGARRIO, vice president of The Texas Company, New York, was in California during the past week.

BERT HULL, president of The Texas Pipe Line Company, was in California on a vacation last week.

W. G. MAGUIRE was named president of the Missouri-Kansas Pipe Line Company when recently elected directors, the majority of whom favor continuation of the company rather than instituting liquidation procedings, held a special meeting in Wilmington, Delaware, last week. Other new officers are A. F. Dixon and H. P. Childs, vice presidents; William Tringham, secretary, and H. L. Tower, treasurer.

W. K. WARREN, president of Warren Petroleum Company with offices in Tulsa, has just returned from a short vacation in California with his family. He made the trip to the coast and back by airplane.

R. P. RUSSELL has been appointed executive vice president of Standard Oil Development Company, and, under F. A. Howard, president, will assume general executive responsibility in this company, according to an announcement made yesterday. Standard Oil Development Company is a subsidiary of Standard Oil Company of New Jersey. It conducts or supervises the major part of the research and development work for Standard Oil Company of New Jersey, and provides laboratory service for the company's subsidiaries, Colonial Beacon Oil Company, Standard Oil Company of Louisiana and Standard Oil Company of Pennsylvania.

FRANK C. ROPER and John D. Todd, independent geologists, formerly at Lafayette, Louisiana, have opened offices at 908 Sterling Building, Houston, Texas.

R. C. STEINMAN, chief scout for Sinclair Prairie Oil Company with headquarters in Tulsa, is looking over activities in Glacier County, Montana, and the Cut Bank field of Wyoming.

ROBERT S. ELLISON, president of both Stanolind Pipe Line Company and Stanolind Crude Oil Purchasing Company with headquarters in Tulsa, was a visitor in Casper, Wyoming, last week while on an inspection trip of pipe lines in Kansas, Nebraska and Wyoming.

G. J. DESBARATS, Ottawa, president of the Engineering Institute of Canada, was a visitor in Calgary, Alberta, last week and inspected the Turner Valley oil field.

C. P. PORTER, Cleveland, Oklahoma, production man for the Blackwell Oil & Gas Company and the Mullendore, Berry & Berry interests, is in Flora looking after interests of the companies in the coal basin area of Illinois.

M. E. MACKLEY, vice president of Natural Gasoline Corporation with headquarters in Tulsa, has returned from a vacation in Minnesota.

L. PHILLIPS, W. G. Pearce, E. H. Allan, Mrs. Lucy McDougall and R. F. Bishop were named directors of Graystone Consolidated Petroleums, Ltd., when shareholders held their annual meeting in Calgary, Alberta, last week.

RALPH WILL, geologist with many years experience in the Rocky Mountain and Mid-Continent fields, has joined Anglo-Canadian Development & Holding Company, Ltd., operating in the Turner Valley field of Alberta, as general field superintendent of all drilling operations.

ALFRED BEST, Cia. Mexicana de Petroleo "El Aguila," S. A., at Tampico, Mexico, who left several months ago for a vacation in England, has accepted a position in the London office of the company.

CHARLES C. HART, formerly United States minister to Iran but now vice president of Amiranian Oil Company and Inland Exploration Company, was in London recently for a conference with John M. Lovejoy, president of the companies, and has left again for Iran.

H. C. GEORGE, head of the department of petroleum engineering at the University of Pittsburgh, has resumed his duties after an absence of a year due to a severe illness, from which he has fully recovered.

W. M. HOLLAND, president of Homestead Oil & Gas Company of Texas, returned to headquarters at San Angelo last week after conferring with other officials of the company in Philadelphia and Toronto, Canada.

M. L. FELDMAN, chief clerk of the production division of the Fort Worth district office of Continental Oil Company, accompanied by members of his family, is visiting the scenic spots in northern Colorado and Wyoming.

DON CHAPEL, formerly with Shell Petroleum Corporation at Ardmore, Oklahoma, has become connected with the geological department of the Transwestern Oil Company, of Oklahoma City.

W. F. ST. CLAIR, district superintendent for Cities Service Oil Company at Okmulgee, Oklahoma, has completed 40 years of service in the oil business. He has been in virtually every branch of the industry, having been with Cities Service interests since 1916.

JOHN G. MAYO, independent operator, of Houston, Texas, together with his family, is vacationing in Maine.

GEORGE FOSTER, official of Devonian Oil Company, Tulsa, Oklahoma, last week was a visitor in Houston, Texas.

W. H. TAYLOR, district land man of Amerada Petroleum Corporation,, Tulsa, Oklahoma, has returned to his desk after completing a business trip through the coastal region of Louisiana.

HERMAN BROWN, independent operator of Austin, Texas, was in Houston last week.

HAL THOMPSON, of the land department of the British-American Oil Company, Tulsa, Oklahoma, recently was visiting in Casper, Wyoming.

F. G. JAMISON, formerly manager of Continental Oil Company's branch office in Wichita, Kansas, was transferred to the company's Denver, Colorado, offices.

MAURICE T. GRUBB, independent operator of Houston, Texas, is at present on a business trip to Michigan, where new producing horizons have been opened recently.

EDWIN M. JONES and **E. C. RACH,** of San Antonio, have returned after spending considerable time in Arkansas in connection with the drilling of five wells in the new district in that state. All of the wells were for Mr. Jones.

FOSTER MORRELL has been appointed temporary supervisor of the Mid-Continent Division of United States Geological Survey, to fill the vacancy following the death of J. M. Alden. Morrell, who will occupy the position until a permanent supervisor is appointed at Washington, has been assistant supervisor of the Mid-Continent Division.

G. G. MORTIMER, with Mortimer and Springer, San Antonio independent operator, is vacationing in Canada.

FRANK GRAVIS, San Antonio independent, and discoverer of the North Sweden field, Duval County, is sightseeing in Paris, France. Mrs. Gravis, has just returned to San Antonio after several months in California.

AL BUCHANAN, San Antonio drilling contractor, is recovering from an illness of several weeks.

C. R. POPE, geologist and independent operator of San Antonio, is back from a trip to Louisiana and Gulf Coast fields.

JOE W. COSNER recently acquired a Diesel drilling rig from Southwest Drilling Company and is now in the general contracting business. Cosner in turn sold his interest in Southwest Drilling Company and Southwest Production Company.

CARL TEMPLETON, who watches the wells in the Enid district for Shell Petroleum Corporation, is on vacation.

PAUL POTTER, Scouting Department of Shell Petroleum Corporation at Tulsa, returned from recent special scouting trip into Kansas.

FRANK PHILLIPS, accompanied by Mrs. Phillips, is in Europe.

CARL LEA, member of the production department of Skelly Oil Company, Tulsa, with Mrs. Lea and small daughter, are visiting in Houston and along the Gulf Coast.

R. E. SHUTT, exploration manager of Shell Petroleum Corporation's Tulsa division, is on vacation.

ANDREW M. ROWLEY, for many years editor of the Oil & Gas Journal and more recently publisher of Petroleum Royalties, has become oil editor of the Tulsa Tribune.

C. W. MICHAELS, Oklahoma City scout for Shell Petroleum Corporation, is on vacation.

O. G. DEVENISH, president of Devenish Petroleum, Ltd., with headquarters in Calgary, Alberta, is on a visit to the United States where he will contact groups interested in development of Skiff field.

BUFORD R. WELLS, special representative of Pan American Petroleum Corporation, has been named assistant state manager in Mississippi, with headquarters in Jackson. He succeeds Ben J. Louviere who was granted a leave of absence because of ill health.

JOHN R. SUMAN, vice president of Humble Oil & Refining Company, recently was elected president of the Houston Social Service Bureau.

O. C. GARVEY, independent operator of Livingston, Texas, was in Houston recently. He is drilling a well near Cleveland, Liberty County.

WILLIAM NOBLE, of Noble and Baker, at Houston, is vacationing in Colorado.

SAM E. DUNMAN, JR., independent operator of Houston, is spending his vacation in New Braunfels, Texas.

C. C. BISHOP of San Antonio, Texas, was a recent visitor in Houston. He has production in Brooks County and the lower Rio Grande Valley, South Texas.

R. H. BRECKON, president of Vera Oilfields, Ltd., with headquarters in Saskatoon, Sask., was a visitor in Calgary, Alberta, last week.

D. V. CARTER and A. J. BALCOM, Magnolia Petroleum Company executives from the Dallas office, were recent visitors at the firm's Stonewall, Oklahoma, station, control point for operations in Fitts field.

E. B. SWANSON, assistant director of Petroleum Conservation Division of the Department of the Interior, Washington, who has been visiting southwestern production areas, was a visitor in Kansas during the past week.

BILL STEWART, independent operator of Alice, Texas, was visiting in Houston last Wednesday.

R. H. GOODRICH, independent operator and geologist of Houston, Texas, is back from a vacation, which he spent with his family on the Hawaiian Islands.

JOHN ARMSTRONG, independent operator of San Antonio, Texas, was a visitor in Houston last Wednesday.

DR. N. E. LOOMIS has been made vice president in charge of research and development for Standard Oil Development Company, research subsidiary of Standard Oil Company of New Jersey.

R. H. DICKSON has been appointed general secretary of Standard Oil Development Company, which is Standard Oil Company of New Jersey's research subsidiary.

RULDOPH SEIDEN, consulting metallurgist of Kansas City, Missouri, has moved to 5217 Wayne Street.

M. J. MUNN, independent geologist of Texarkana, made a short business visit to Tulsa.

A. H. PROCTER, superintendent of production for Magnolia Petroleum Company, Fitts field, Oklahoma, has returned from a vacation in southern California.

DIED:

ANDREW W. MELLON, internationally prominent oil man, financier and diplomat, died August 26 at the home of a daughter in Southampton, Long Island, at the age of 83.

He was born March 24, 1854 in Pittsburgh, Pennsylvania, the third son of the late Thomas Mellon, judge and banker. After attending the University of Pittsburgh, he entered his father's banking house, of which he became partner a year after his father had retired from business. In 1902 he founded the Mellon National Bank, one of the most important banks in the country, of which he was president until 1921. In 1907 he and his brother purchased control of the bankrupt J. M. Guffey Petroleum Company, which grew under his guidance into a $600,000,000 organization, the present Gulf Oil Corporation, with headquarters at Pittsburgh.

Not only was he well known in financial circles throughout the country, but he also enjoyed a reputation as an able diplomat. In 1921 he was appointed Secretary of the Treasury under President Harding, and he served in that capacity also in the administrations of Presidents Coolidge and Hoover. In 1932 he was made ambassador to England, from which post he returned in 1933.

Mellon's huge fortune, which can only be estimated, consists of extensive holdings in banking and steel concerns and the Aluminum Company of America, as well as the large interests in Gulf Oil Corporation.

He has been classed as one of the world's greatest geniuses in organizing and financing successful enterprises.

KNOX GARVIN, oil producer and Oklahoma state senator, died August 25 in Baltimore, where he went for medical attention in July.

Garvin held producing properties in both Texas and Oklahoma. His home was in Duncan and his first oil ventures were in Southern Oklahoma. Development of the East Texas field found him active there and he later extended his holdings in Texas.

When Governor E. W. Marland started drilling state land around the capitol building at Oklahoma City in 1936, the permits were issued to Garvin, who was given the protection of the state militia, since Oklahoma City officials threatened to halt the drilling. The leases later were sold to Sunray Oil Company, which took over operations.

HARRY S. TILLINGHAST, 57, vice president of Simpson-Fell Oil Company, Ardmore, Oklahoma, died August 23 of a heart attack. At the time of his death he was visiting in Washington, Rhode Island. He is survived by his widow and three sons.

R. E. BROOKS, JR., 46, well known oil man of Houston, Texas, died at his home on August 25. Formerly connected with The Texas Company, he was at the time of his death president of the Southern Exploration Company, Houston, Texas. He is survived by his widow and two children.

KNOX L. GARVIN, 46, independent operator of Duncan, Oklahoma, died on August 25 at a hospital in Baltimore, Maryland.

JOHN HOWARD JORDAIN, manager of Socony-Vacuum Oil Company interests in Spain for the past 12 years, was killed August 19 in an automobile accident near Valencia, Spain. After outbreak of the Spanish civil war, he was active in obtaining relief for American refugees.

MIKE LIVINSKY of Henryetta, Oklahoma, was killed August 19 near Washington, Kansas, in an explosion of a Northern Natural Gas Company pipe line which had been uncovered. Three others were injured in this explosion.

Markets Disturbed

HIGH PRODUCTION CAUSES UNSTEADINESS OF PRICES

ALTHOUGH better control is promised for September, the overproduction of crude oil which has taken place in August has perceptibly affected the markets for refined oils as well as the market for crude.

The gasoline market has grown increasingly unsteady, and retail price cutting has developed in various sections of the United States.

Price reductions have not been confined, moreover, to the refined oil market, but have extended also into the crude market.

Gulf Coast Crude Cut

The most recent instance of price reducing of crude oil was that of August 14, in which the Sun Oil Company lowered prices of crude from 2 to 12 cents a barrel in several fields of the Texas and Louisiana Gulf Coast.

That reduction came only a few weeks following price reductions in Michigan.

It is indicated that the price cut of the Gulf Coast reflelted somewhat smaller demand for lighter oils, with the passing of the heavy vacation motoring season.

These reductions in the prices of crude oil further reflect weakness of the crude market, which previously was manifested in Kansas and North Louisiana, when important purchasers of crude announced that they would begin pro-rating their purchases of oil.

Production At Record Levels

The recent unsteadiness of the crude market undoubtedly reflects the lax control of production that has prevailed in August, with the leading oil producing states having in effect generous allowables. Under the high allowables, United States crude oil production in August has risen successively, from week to week, to new all-time peaks. In the week ending August 21, the wells of the country produced, on the average, 3,729,350 barrels of crude oil daily. Nearing the 4,000,000 barrel per day mark, this unprecedented output was being viewed with considerable concern in some quarters, despite the fact that demand for petroleum has been running this year at the highest levels on record.

Statistics Continue Favorable

Although the markets lately have shown signs of unsteadiness, largely because of excessive crude production, the general market outlook must be classed generally as hopeful, for the industry occupies an especially favorable position statistically.

Despite the recent trend toward too much crude production, the country's inventories of crude oil are only slightly higher than a year ago, while the demand for petroleum has been running this year about 11 percent higher than last year.

The Bureau of Mines reported that the industry had on hand, August 7, a total of 307,922,000 barrels of crude oil. That was only a few million barrels more than the inventories held one year ago.

Gasoline Stocks Decline

Stocks of gasoline in the United States, similarly, are well justified by market conditions. In the week ending August 21, the gasoline inventories were reduced another 1,827,000 barrels, declining to 67,260,000 barrels. At that level, the gasoline stocks were about 9 percent higher than one year previously, but the demand is running about that much higher this year than last year. For the first six months of this year, the Bureau of Mines showed that gasoline demand in the United States was 10 percent higher than in the similar period last year. Moreover, the bureau has estimated that in September the demand for gasoline will be 10 percent greater than that of September last year.

Refinery Operations High

The lowering of gasoline stocks in the week ending August 21 took place despite a continuation of refinery operation near all-time peak proportions.

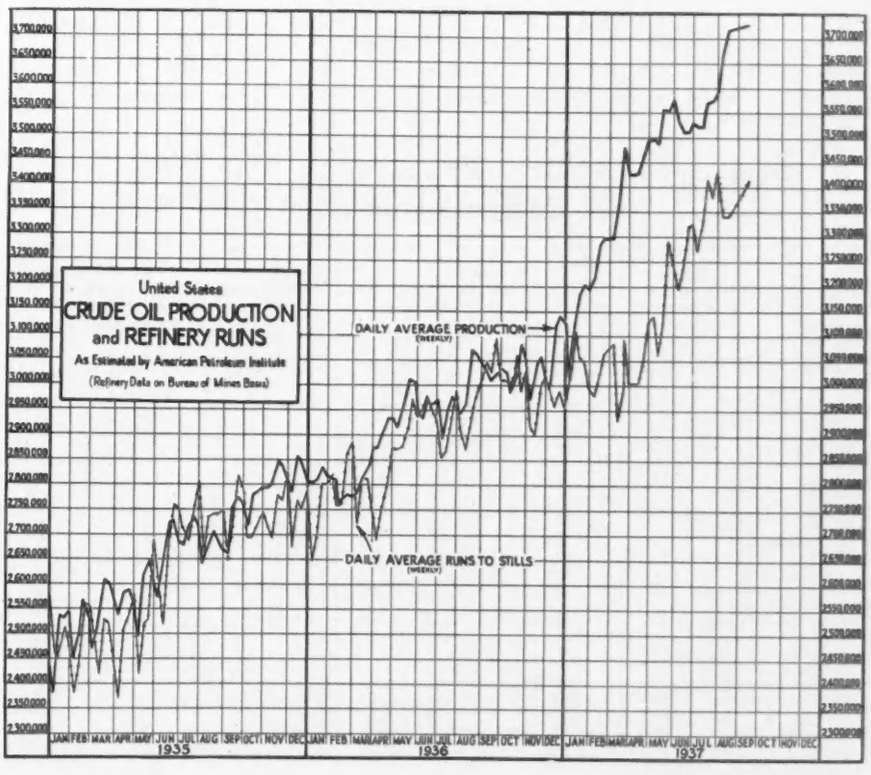
In the week ending August 21, crude runs to stills increased 75,000 barrels over the daily average of the previous week and were within 10,000 barrels of the all-time peak that was set in the week ending July 31.

Fuel Oil Stocks Up

The industry in the week ending August 21 continued to build up its inventories of fuel oils, in anticipation of the heavy demand that normally occurs in the fall and winter. In the week of August 21, the total stocks of gas and fuel oils were expanded another 829,000 barrels, or to a total of 110,493,000 barrels. That figure was slightly lower than the total on hand one year ago. While the fuel stocks, thus, are lower than a year ago, the demand for fuel oil has been running this year substantially higher than last year. This situation regarding fuel oil stocks naturally is promoting strong markets for these burning oils.

Gulf Coast Price Cut

The revision of crude prices in Gulf Coast fields by Sun Oil Company, effective August 14, apparently reflected, at least for that company, an over-



supply of higher gravity oils. The change did not affect oils below 35 gravity, but for crude of 35 gravity and up, the revision represented a cut of 2 to 12 cents a barrel. These reductions were made by grouping all oils, including 35 gravity and above, at a price of $1.29 a barrel. Previously, 35 gravity crude was priced at $1.31 per barrel and for each degree of gravity above that, the price was two cents higher, with a top price of $1.41 a barrel applying to 40 gravity and above. Thus, the new schedule of the Sun Oil Company begins at 95 cents a barrel for oil below 21 gravity, calls for 98 cents a barrel for 21 to 21.9 gravity and extends up by three cent differential to $1.13 a barrel for 26-26.9 gravity; while 27-27.9 gravity is $1.15 a barrel with a 2-cent differential applying up to the top price of $1.29 for 34 gravity and above. These prices apply in the Vinton and Hackberry fields, Louisiana Gulf Coast, and in the Texas Gulf Coast fields of Cotton Lake, South Cotton Lake, West Beaumont, and Nome.

This revision by Sun Oil Company was not followed, however, by other purchasers on the Gulf Coast. The Humble Oil & Refining Company, for instance, continues to pay $1.41 a barrel for 40 gravity crude and above in the Texas Gulf Coast area.

The increased unsteadiness lately in the retail market for gasoline has been manifested in various sections of the country. The retail market is reported to be in bad condition over a large part of Oklahoma. In that state, widely varying prices are being posted by service stations in Oklahoma City, Tulsa, Shawnee, Chickasha, and other towns. Price cutting involves not only third grade gasoline but also the higher octane material. Meanwhile, it is alleged that in Oklahoma there is considerable bootlegging of inferior lubricating oil, falsely sold under well-known brands. There has been gasoline price cutting at service stations also in Pittsburgh and some other points in the East. Price cutting has also occurred in Beaumont and other places in Texas.

Mid-Continent Prices

Tank car prices at Mid-Continent refineries late last week were largely the same as for the preceding several weeks.

U. S. motor gasoline continued to range in the Oklahoma market about as follows: 62 octane and below, 5 to 5¼ cents a gallon; 63 to 67 octane, 5⅜ to 5¾ cents; and 68 to 70 octane, 6 to 6⅛ cents.

Corresponding prices in the Chicago market were: 4¾ to 5 cents, 5¼ to 5⅝ cents, and 5⅝ to 6 cents.

At East Texas refineries the most common product, 60-62, 400 end point gasoline, ranged from 5⅛ to 5¼ cents a gallon.

Kerosene prices f.o.b. Oklahoma refineries ranged from 4 to 4¼ cents a gallon for the 41-43 water white grade, and from 4¼ to 4⅜ cents for the 42-44 water white grade. Corresponding prices in the Chicago market were: 4 to 4⅛ cents and 4 to 4⅜ cents.

CRUDE OIL PRICES

Complete tables of prices paid for crude oil at the well in principal fields will be found on page 50, August 2 issue. Hereafter this schedule will appear only in the first issue of each month.

Trends of United States Production and Stocks

(Figures American Petroleum Institute, except Crude Stocks, Bureau of Mines)

WEEK ENDED	Crude Oil Production (Barrels Daily)	Crude Runs to Stills (Barrels Daily)	Crude Oil Stocks (Barrels)	Gasoline Stocks (Barrels)	Gas X Fuel Oil Stocks (Barrels)
January 2, 1937	3,121,400	3,030,000	287,659,000	62,661,000	106,330,000
January 30	3,194,050	2,995,000	285,384,000	69,540,000	102,078,000
February 27	3,296,100	3,085,000	288,121,000	78,786,000	99,534,000
March 27	3,431,300	3,060,000	293,587,000	*83,538,000	96,591,000
April 24	3,496,400	3,125,000	300,737,000	82,303,000	94,100,000
May 1	3,497,450	3,140,000	303,249,000	81,407,000	94,291,000
May 29	3,573,000	3,245,000	306,445,000	78,758,000	96,139,000
June 26	3,529,600	3,235,000	307,679,000	75,427,000	100,395,000
July 31	3,591,900	*3,425,000	308,250,000	70,872,000	108,209,000
August 7	3,651,150	3,340,000	307,922,000	69,216,000	108,597,000
August 14	3,718,600	3,340,000	308,737,000	69,087,000	109,664,000
August 21	*3,729,350	3,415,000	.....	67,260,000	110,493,000
August 22, 1936	3,070,400	2,925,000	304,938,000	61,953,000	110,795,000

*All time peak.

Summary of Wells Completed in the United States Week Ending August 28, 1937

	Completions	Oil Wells	Gas Wells	Failures	Initial Production	Total, 1937	Total this Date, 1936
Alabama	.....	.....	.....	.....	.....	1	2
Arkansas	6	3	1	2	460	69	70
California	26	17	.....	9	3,250	929	720
Colorado	2	.....	1	1	.....	8	8
Florida	.....	.....	.....	.....	.....	1	2
Illinois	.....	.....	.....	.....	.....	114	4
Indiana	.....	.....	.....	.....	.....	84	143
Kansas	46	32	6	8	37,265	1,736	1,086
Kentucky	20	8	7	5	152	231	191
Louisiana	13	7	3	3	5,374	609	690
Michigan	17	12	2	3	3,775	605	513
Mississippi	1	.....	.....	1	.....	10	5
Montana	4	3	1	.....	475	125	99
Nebraska	.....	.....	.....	.....	.....	.....	.....
New Mexico	16	14	1	1	10,302	473	379
New York	.....	.....	.....	.....	.....	10	.....
Ohio	31	7	16	8	227	986	1,262
Oklahoma	56	40	3	13	14,338	2,112	1,960
Pennsylvania	.....	.....	.....	.....	.....	122	.....
Texas	283	219	6	58	314,088	10,015	8,265
Utah	.....	.....	.....	.....	.....	.....	.....
West Virginia	18	3	13	2	32	600	449
Wyoming	2	1	1	.....	96	74	52
Total this week	541	366	61	114	389,834	18,914	15,900
Total last week	592	397	49	146	528,769	.....	.....
Total this year	18,914	13,107	2,533	4,274	15,777,995	.....	.....

Texas Panhandle natural gasoline output is up

Pampa, Texas.—Natural gasoline production in the Texas Panhandle was estimated at 21,794,000 gallons during July, representing an increase of 1,532,000 gallons over the previous month. The district has 46 plants in operation. About 44 percent of the production is from plants operated by Phillips Petroleum Company.

Comparison of Permits Granted for New Wells

STATE	Week Ending Aug. ..	Total this Mo.	Total this Year	Total this Date Last Year	1936 Year Total
Arkansas	8	31	159	63	103
California	30	132	1,054	685	1,054
Louisiana	26	123	827	757	1,107
Kansas	59	241	1,831	1,193	1,873
Michigan	18	74	660	495	762
Oklahoma	43	204	1,960	1,946	2,594
Texas	214	1,458	12,102	10,022	15,582
Total	398	2,263	18,593	15,161	23,075

Production Higher

SEPTEMBER ALLOWABLES MAY REDUCE OUTPUT

THE record-breaking production of crude oil of recent weeks was extended through the past week, ended August 28, as output of the wells of the United States averaged 3,718,125 barrels daily. That was 7975 barrels a day more than in the previous week, and 255,225 barrels a day more than the average daily production recommended for August by the Bureau of Mines.

While the production of the past few weeks has been larger than justified by the market requirements, causing some anxiety in the industry and unsteadiness of the markets, there is in prospect, effective September 1, stricter control of the crude oil output, as allowables of the leading producing states for September will be more in line with indicated demand.

The slight increase in production last week resulted from gains in Texas, Kansas, and Louisiana, that outweighed small declines in Oklahoma, California, and New Mexico.

Texas last week averaged 1,541,700 barrels daily, which was 8100 barrels a day more than in the previous week and 146,500 barrels a day more than the Bureau of Mines estimate of needed production.

Kansas output increased 7300 barrels, to 201,350 barrels daily, and was 850 barrels over the indicated demand.

Louisiana averaged 266,650 barrels daily, or 5550 barrels a day more than in the previous week and 12,750 more than the demand estimate. The output of 89,850 barrels daily for the northern district of the state included 51,125 barrels from the Louisiana side of the Rodessa field and 13,425 barrels daily from Lisbon field. The output of the Miller County, Arkansas, extension of Rodessa field, last week averaging 2525 barrels daily, was included in the 31,150 barrels a day averaged by the state of Arkansas.

Oklahoma last week averaged 641,525 barrels a day, or 12,075 barrels a day less than in the previous week, and 8125 barrels a day more than the Bureau of Mines recommendation.

California production was down 4,000 barrels at 670,000 daily, and was 48,200 barrels a day above the indicated demand.

New Mexico showed a 50-barrel decline in averaging 114,050 barrels daily, and was 13,250 barrels above the estimated demand.

United States Crude Oil Production

Estimates Compiled by The OIL WEEKLY

DISTRICT OR STATE	Bureau of Mines Recommendation (Daily in Aug.)	ACTUAL PRODUCTION: BARRELS DAILY FOR WEEK ENDING August 28	August 21
TEXAS—			
Texas Panhandle	.....	85,400	82,700
North Texas	.....	75,200	75,100
West Central Texas	.....	33,700	33,700
West Texas	.....	242,300	241,400
East Central Texas	.....	129,300	128,400
East Texas Field	.....	473,300	472,300
South Texas	.....	274,800	269,600
Texas Gulf Coast	.....	227,700	230,400
Total Texas	1,395,200	1,541,700	1,533,600
OKLAHOMA—			
Oklahoma City	.....	156,550	162,200
Seminole Area	.....	123,475	125,650
Crescent	.....	10,375	10,300
Lucien	.....	15,150	14,825
Fitts	.....	93,750	97,550
Edmond	.....	18,100	18,700
Moore	.....	11,825	11,950
Others	.....	212,300	212,425
Total Oklahoma	633,400	641,525	653,600
KANSAS—			
Ritz-Canton	.....	5,850	5,875
Chase	.....	7,300	7,850
Hollow-Nikkel	.....	2,800	2,825
Sedgwick	.....	3,925	4,025
Burrton	.....	14,525	14,475
Lorraine	.....	3,900	4,425
Russell County	.....	36,425	33,300
Silica	.....	22,400	18,875
Others	.....	104,225	102,400
Total Kansas	200,500	201,350	194,050
LOUISIANA—			
North Louisiana	.....	89,850	85,700
South Louisiana	.....	176,800	175,400
Total Louisiana	253,900	266,650	261,100
ARKANSAS	29,100	31,150	30,700
CALIFORNIA—			
Long Beach	.....	57,500	58,000
Santa Fe Springs	.....	43,000	43,500
Huntington Beach	.....	35,500	38,500
Dominguez	.....	28,000	29,500
Inglewood	.....	16,500	16,500
Ventura Avenue	.....	33,500	35,000
Seal Beach	.....	9,000	9,000
Midway-Sunset	.....	72,000	75,000
Elwood	.....	8,000	8,500
Kettleman Hills	.....	79,500	76,000
Mountain View	.....	17,000	18,000
Playa del Rey	.....	8,200	8,000
Wilmington	.....	54,300	55,000
Others	.....	208,000	203,500
Total California	621,800	670,000	674,000
MOUNTAIN STATES—			
Wyoming	52,800	59,800	58,800
Montana	17,700	17,600	17,900
Colorado	4,900	5,300	5,400
Total Rocky Mountain States	75,400	82,700	82,100
NEW MEXICO	100,800	114,050	114,100
EASTERN STATES	121,900	123,800	122,200
MICHIGAN	39,900	45,200	44,700
Total United States	3,462,900	3,718,125	3,710,150

California Tax Collections

Los Angeles.—During July California's income from its 3 cents a gallon tax on gasoline sold was $4,576,152, an increase of 2.44 percent over the similar month in 1936. Total taxable gallonage moved in the state in July was 152,538,426 gallons, and of this total, 108,251,568 gallons was credited to the seven major companies. Total of 151 manufacturers of gasoline reported, and 66 companies reported in excess of 300,000 gallons each for the month.

Standard Oil Company continues to lead all major companies on total taxable gallonage. Shell Oil Company comes second. Here are the total figures for July: Standard Oil Company, 27,810,950 gallons; Shell Oil Company, 19,579,814 gallons; Union Oil Company, 15,273,355 gallons; Richfield Oil Corporation 13,046,246 gallons; Tide Water Associated 12,434,604 gallons; General Petroleum Corporation 11,049,207 gallons; The Texas Company 9,056,292 gallons; total all companies for state 152,538,426 barrels.

IN THE

Financial Field

Oil company shares resist general downward movement of the markets for securities.

* * *

Earnings continue good in third quarter, with business volumes large and prices favorable.

OIL COMPANY securities in recent weeks have been losing some ground in the general decline that has been taking place.

The oil stocks, however, continue to enjoy a better than average popularity.

During most of this year, the oil shares have been in comparatively great favor. In periods of general decline of the market, they have proved resistant; and in any rallies, they have shown exceptional strength.

Oil Earnings Favorable

The favor that has been bestowed on the oil shares has been based, apparently, on the favorable display of earning power by the oil companies this year. These good earnings, in turn, are based largely on the unusually good statistical position that the industry occupies. Demand for oil has been running this year at the highest levels on record, and the industry has been successful in balancing supply with the demand. Consequently, the markets for oils have been stable and at satisfactory price levels. The large volume of business handled and the favorable prices, together, naturally have resulted in relatively good earnings.

Meanwhile, the industry's inventories of crude and refined oils have been comparatively low, and no excess oil has been hanging over the market to depress prices. These inventories are lower than at this time last year, considering that demand is running higher.

Outlook Promising

For the immediate future, it is indicated that control of supply will continue effective and that markets and earnings of the oil companies will continue favorable.

This favorable outlook undoubtedly is responsible, in large part, for the comparatively good showing that is being made by the oil company shares.

For the third quarter of this year, it is indicated, earnings of the oil companies will continue around the high level that prevailed in the first half of the year. The third quarter already is two-thirds gone, and for the remaining month, no serious interruption of the current high earning power is expected. For the first six months of 1937, oil companies in the aggregate reported about 50 percent more profit than in the similar period last year, and, therefore, were about equalling the profits shown in 1929.

Financing Is Planned

Like many companies in other industries, some oil companies at present are finding that their working capital is inadequate for the present large volumes of business that are being handled. Consequently, several important companies are expecting to offer additional securities, in order to raise cash for expanding their operations.

It was common practice in the past for oil companies to finance such expansion out of their cash positions. But since enactment of the tax on undistributed profits of corporations, this practice is heavily penalized.

Some such financing already is under way, and more is expected to occur. Several oil companies already have done some financing, including the Texas Corporation, Socony-Vacuum Oil Company, and Tide Water Associated Oil Company.

A recent announcement indicates that Pure Oil Company is to carry out $44,244,300 of new financing. It is to be in the form of a new cumulative convertible preferred stock. Stockholders of record September 3 will be given the right to subscribe at $100 a share.

The proceeds from the stock sale will be used to redeem 76,620 shares of 8 percent preferred stock at $100; to pay off $3,000,000 in bank loans maturing from 1938 to 1940; to retire $25,000,000 in bank loans that were incurred in redeeming the 15-year 4½ percent notes due July 1. Proceeds not required for such purposes will afford additional working capital for the company. Such available new capital will be used in modernizing refineries, developing producing properties, and providing additional working capital. The financing program will leave only two types of securities outstanding, the common and preferred stock.

The Consolidated Oil Company, at its latest stockholders' meeting, was authorized by the stockholders to issue $50,000,000 in debentures, at the discretion of the directors, and it was stated that any sum so raised would be used primarily for new projects.

Fight In Tide Water

Controversy continues between J. Paul Getty, Pacific Coast oil magnate, and the management of the Tide Water Associated Oil Company, in which Getty is a substantial stockholder.

William F. Humphrey, president of Tide Water, has sent letters to the stockholders of the company, upholding the record of the management. The letter was a reply to a recently published letter by Getty. Humphrey declared that the Tide Water Company had made continued progress during the past four years, and that the company for the first six months of this year showed the greatest earnings for any six months' period in its history.

The criticisms of Getty were addressed several weeks ago to the stockholders of the Tide Water Associated Oil Company, with Getty acting in behalf of the Mission Corporation, which is one of the largest stockholders of the Tide Water Associated Oil Company and in which Getty has a large interest. Getty's letter proposed, among other things, that the number of members of the company's board of directors be reduced and that the members of the board be elected annually. At present, one-third of the directors are elected each year. In reply, Humphrey asserted that the present system had been approved by shareholders on three occasions.

Reports on Earnings

Reports have become available lately on the earnings of various oil companies.

The Republic Petroleum Company has reported for the first six months of this year a net profit of $103,818, after usual deductions. This compares with a profit of $88,444 for the first half of 1936.

North Central Texas Oil Company, Inc., reports for the three months ended June 30 a net profit of $30,684, after the usual deductions, but before federal taxes, as compared with profit of $27,173 in the previous quarter, and a profit of $18,438 in the second quarter of 1936. The profit of the company for the first six months of this year was $57,897, before federal taxes, as compared with a profit of $34,447 in the first six months of last year.

Standard Gas & Electric Company, a holding company, has reported for the first six months of this year a profit of $2,614,823, after usual deductions, compared with $2,026,789 in the corresponding period last year.

El Paso Natural Gas Company has reported for the 12 months ended June 30, net earnings of $1,380,444, available for common dividend and surplus, compared with $569,129 in the preceding 12 months.

Hancock Oil Company of California reports for the fiscal year ended June 30 a net profit of $503,894 after usual deductions, including federal income taxes, compared with $412,256 in the preceding 12 months.

Margay Oil Corporation has reported for the five months ended May 31, 1937, a net profit of $177,521, after usual deductions except for federal taxes.

Dividend Announced

Standard Oil Company of Kentucky recently announced it would pay an extra dividend of 15 cents a share on the capital stock and the regular quarterly dividend of 25 cents, both dividends being payable September 15 to stockholders of record August 31.

Public offering is being made of 88,333 shares of $5 par value common stock of General American Oil Company of Texas, headquartered at

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Shreveport, Louisiana, the price being $6.50 a share. Proceeds to the company will be used, the prospectus states, to pay purchase money, tax, and other obligations, and for additional working capital. The company produces, transports, refines and markets crude oil, natural gas, and certain by-products. Properties include 190 wells on 1155 acres in the East Texas field. The company's net income for the 12 months ended June 30 was $483,860.

Properties Change Hands

Several important purchases of properties by various oil companies have occurred lately. Properties of World Oil Company, Incorporated, Fort Worth, Texas, located in the World, or Powell field, Crockett County, West Texas, were reported sold for consideration of $165,000 to Sam Letwin and F. G. Lippett of Fort Worth, subject to approval of federal court, the World Oil Company having been in receivership since 1931. An oil payment of $850,000 due to the company was sold to Frank Black of Fort Worth for $37,500.

George Kimball and associates, Wichita Falls, Texas, owners of the Bryson Pipe Line Company, were reported to have bought a one-half interest from Barney Cockburn in the wells and 280 acres of Cockburn in Jack County, for consideration of $100,000 cash and $300,000 in oil.

Corvett Oil Company was reported to have sold to W. R. Worthington of Reno, Nevada, a three-quarters interest in its Jack County, Texas, holdings for $130,000 cash.

Superior Oil Company, Tulsa, was credited with having purchased, for $1,000,000, part cash and part out of oil, the oil and gas holdings and leases of Tex-Mex Petroleum Corporation and Abell Brothers, of Midland, Texas, the holdings being in the South Ward field, Ward County, and in the Pecos Valley and Netterville fields of Pecos County, West Texas.

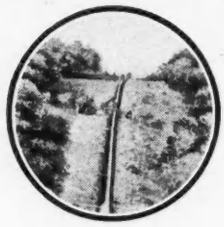
Sunray Oil Corporation is reported to be contemplating purchase of the Rotan field discovery well, Fisher County, West Texas, and surrounding 1000 acres from Southern Oil Corporation.

Atlantic Expanding

In earning for the first half of 1937 net profit of $3,440,147, compared with $3,139,916 in the similar period last year, Atlantic Refining Company showed the most profitable results for the first half of the year since 1929. The company also produced in the first six months this year more crude oil than ever before in the corresponding period. The company made capital expenditures of over $14,000,000 in the first half of 1937.

Recent construction activities of the Atlantic Refining Company included under capital expenditures have included those at the new refinery at Atreco, Texas Gulf Coast, at the polymerization plant at Philadelphia, and on a new tanker that is under construction. Similar items that will be included in capital expenditures for the latter half of the year and a part of 1938 are a second tanker that has been ordered and an extension of product pipe line facilities, through construction of a line from Williamsport, Pennsylvania, to Rochester and Buffalo, New York, by subsidiaries of the company.

PIPE LINE NEWS



Let contract for 160-mile Louisiana Coast line.

* * *

Many Texas gas and oil line extensions planned.

LITTLE of importance occurred in pipe line circles the past week. Outstanding was the awarding of a contract for a previous announced (The OIL WEEKLY, July 26) 160-mile oil system in South Louisiana. Plans for the construction of several short lines and minor enlargements of existing systems were made known, and a proposal to build an important gas line in the East was given up.

Let Louisiana Contract

The pipe line department of Standard Oil Company of Louisiana awarded a contract to Williams Brothers of Tulsa for the construction of a 160-mile system in Louisiana Gulf Coast. The line is to extend from the firm's tank farm on the west bank of the Mississippi river at Baton Rouge, where the concern has a refinery, to Sunset, Louisiana. At this point the system will be divided, one unit going to the Roanoke field and the other to Jeanerette. There will be 25 miles of 10-inch line, 63 miles of 8-inch and 72 miles of 6-inch laid. A pump station is to be erected at the junction of the two lines at Sunset. Capacity of the system is to be 20,000 barrels daily.

Several South Texas Projects

Edwin M. Jones has secured 12½ miles of right-of-way from the recently discovered Ezzell Ranch field in McMullen County to railroad siding at Kittie, and will build a 4½-inch main. It is possible, however, that this plan will be abandoned and that right-of-way will be secured the remainder of the distance to Corpus Christi, about 80 miles, and a line built to deep water terminal at that point. The Ezzell field's development of the next several weeks likely will have a great bearing on the exact nature of the project.

Benavides Refining Company, a recently formed concern, is reported to be contemplating the removal of a small refining unit from the East Texas field to Benavides in Duval County, which will involve the building of a short line out of the Sweden district. The corporation includes C. L. McIver, Brown McCallam and J. S. Presnall, Jr.

The Eastern Pipe Line Company, a new San Antonio concern, formed for the purpose of buying crude in the Rio Grande Valley, will construct a small gathering system in several Rio Grande Valley fields. Details of the project are not completed. The concern is headed by Nelson P. Wimberly, H. H. Hensley and J. L. Sewell.

Duval Pipe Line Company (Benedum and Trees interest) are completing preliminary work for the construction of its pipe line from the Sweden sector of Duval County to Corpus Christi. Five-inch pipe is reported to be enroute to Corpus Christi and practically all right-of-way surveying and title work is complete.

New Sand Hills Outlet

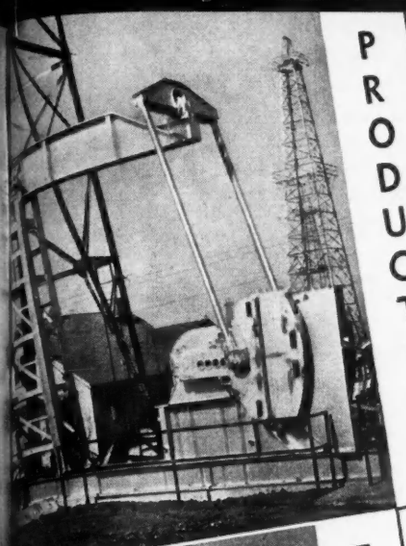
Gulf Refining Company, pipe line division, has authorized the construction of 27 miles of 6-inch welded line to extend east from the Sand Hills field, Crane County, to a point about 11 miles north of its Crane station where it will tie into its dual 8-inch system. The latter handles crude runs from the Yates, Gulf-McElroy and Church & Fields areas, and the oil is routed via Midland to the company's refinery and tanker terminal at Port Arthur.

This new crude outlet for the Sand Hills field is scheduled to be completed within 40 days, and will have a capacity of 10,000 barrels daily. Heretofore, all production has been handled by Shell Pipe Line Corporation.

Gulf Oil Corporation has completed four oil producers, including two prolific wells, in the Ordovician lime horizon in the Sand Hills field. This oil contains a valuable lube oil content. It is understood that the company will segregate this deep production from that produced by its 10 wells in the Permian zone.

Entrance of Lone Star Gas Company into the Buffalo gas field, Leon County, with an 18-inch trunk line is to follow its recent purchase of operating control of this major sweet gas reserve, southernmost production in the East Texas Woodbine belt. The company plans to construct a 20-mile 18-inch welded line north from the field to intercept a 12-inch carrier that links the Long Lake field with its Central Texas system at Waco.

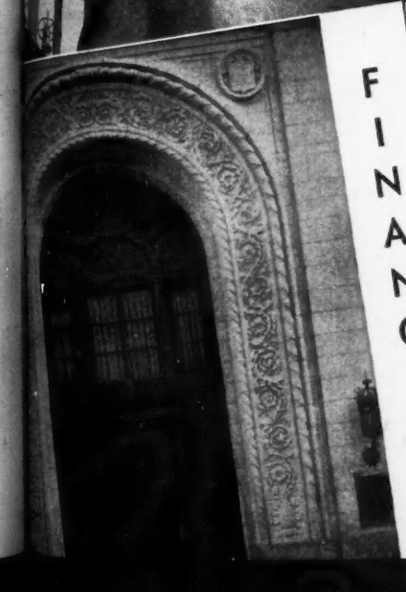
Three prolific gas wells on two separate but closely related structures and gas rights under about 15,000 acres in the Buffalo district were recently acquired by Lone Star Gas Company from Shell Petroleum Corporation and unit members. The deal is reported to have involved a cash consideration of $400,000, and an over-riding royalty of 1½ cents per 1000 feet of gas production until a similar sum is paid to the discoverers, who retain the oil rights. Purchaser is obligated to drill a maximum of four wells under terms of the



PRODUCTION

TRANSPORTATION

REFINING • • • AND MARKETING



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sales contract, and to produce and market a minimum volume of gas annually. The gassers were completed late in 1933 and the fore part of 1934, but have remained shut in due to the absence of a market. Original project for the area was pioneered by the late R. R. Penn and John R. Black, and the block was unitized with eight participating concerns and individuals.

Pennsylvania Line Withdrawn

Pennsylvania Gas Transportation Corporation has withdrawn its application for a state charter, thereby terminating plans to serve 115,000 customers of five United Gas Improvement Company affiliates in five Pennsylvania cities with natural gas from West Virginia and Kentucky fields. The transportation company, a Columbia Gas & Electric Company subsidiary, sought authority to pipe natural gas across nine Pennsylvania counties.

Protests to the proposal, filed early this year with state officials, were entered from the anthracite coal regions. Substitution of natural gas for manufactured would reduce the market for anthracite coal and create more unemployment in the hard coal belt, it was claimed.

While Pennsylvania Gas Transportation Corporation's charter application was not refused, it became apparent that state officials would not act upon it for some months. Meanwhile, contracts of the distributing companies for manufactured gas came up for renewal. Harrisburg Gas Company was obliged to renew its contract for artificial gas from Bethlehem Steel Corporation's Steelton mills last month.

Withdrawal of the charter application also terminates plans to extend natural gas lines to Wilmington, Delaware, at an annual saving of $225,000 to gas consumers in that area. Consumers in Pennsylvania would have realized an annual saving of $700,000.

Gas Outlet for Edmond

Cities Service Gas Company will purchase all residue natural gas from Phillips Petroleum Company's gasoline plant in the Edmond field of Oklahoma as soon as an 8½-mile 10-inch pipe line is completed from the company's nearby system. Phillips Petroleum Company will construct a small compressor station at its gasoline plant.

Cities Service Gas Company is to get a daily delivery exceeding 15,000,000 cubic feet.

Installing Protective Units

Memphis Natural Gas Company is applying cathodic protection to 15 miles of 18-inch coupled high-pressure gas line in the vicinity of Greenville, Mississippi, and Wilmot, Arkansas, and extending into North Louisiana. The work is being done under the engineering supervision of Robert J. Kuhn, consulting engineer of New Orleans.

With the completion of the protection on the present schedule, a total of 66 miles of the 200 miles of 18-inch trunk line will be cathodically protected. Purchased electric power is used on all the protection installations on this line.

Recent inspections were made of a section of pipe electrically protected two years ago. These inspections were made by executives and engineers of the company, including Messrs. Birger Johnson, president; Larry Johnson, metallurgist; H. C. Wallace, vice president; M. H. Higman, chief engineer; L. W. Campbell, superintendent of pipe lines; and Robert J. Kuhn, consulting engineer on corrosion. The excellent results obtained from the initial installation led to the decision to electrically protect the additional 15 miles.

Pipe Line Taxes Upheld

Collection of taxes on oil moved through private pipe lines on privately owned property was upheld in district federal court at New Orleans on August 24. The ruling came in a test suit, predicating litigation involving millions of dollars.

Pan American Petroleum Corporation and receivers for Mexican Petroleum Corporation sought refunds of taxes paid for transporting oil from tanks at Bestrehan to its nearby docks at New Orleans. The oil moved only through company-owned lines.

The court held that the movement of oil constituted taxable movement, and that it was immaterial whether the pipe lines used were privately owned and situated on private property.

45-Mile Illinois Line

Application to construct a 45-mile pipe line linking a tank farm one mile east of Noble, Illinois, to a tank farm on the Illinois Pipe Line Company system at Martinsville, has been filed with the Illinois Commerce Commission by the Wabash Pipe Line Company. The company, a subsidiary of the Pure Oil Company, was incorporated on August 6. The application was signed by D. D. Irwin, president of Pure Transportation Company.

On-the-job machine-coated 20" pipe for Northern Natural Gas Co., strung out in the field at Palmer Kans., ahead of laying operations—awaiting field wrapping.

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IN ON-THE-JOB MACHINE-COATING OIL AND GAS PIPE LINES . . . . .

FOR MANUFACTURE

Bitumastic Enamel is the only product of its kind made long enough to prove its dependability. It has been protecting pipe and other metal surfaces for over half a century. Bitumastic 70B Enamel—the result of improvements in the basic formula—has greater flexibility . . unusual resistance to soil stress (in spite of this flexibility) . . . greater resistance to expansion and contraction of the pipe much greater adhesion . . . better ability to withstand handling abuses—and the time-proved Bitumastic ability to withstand corrosion. It is the ideal coating material for oil and gas pipe line protection.

FOR APPLICATION

With our new on-the-job machine-coating method, we apply Bitumastic 70B Enamel to pipe up to 30" O. D. in a yard shop set up near the right-of-way. Our own men and machine apply Bitumastic 70B Primer and 70B Enamel alone (without waste, drips, runs or festoons)—or with single or double, bonded or unbonded felt wrapping . . . in one continuous operation . . . easily keeping ahead of laying needs.

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We assume undivided responsibility for all coating, including field joints. The laying contractor is freed from all attention to coating application and will suffer no delays. Electric holiday detector is used in both yard and field to insure that coating is intact before line is field wrapped or unwrapped line is back filled. Yard shops set up anywhere for this modern, economical method of on-the-job machine-coating.

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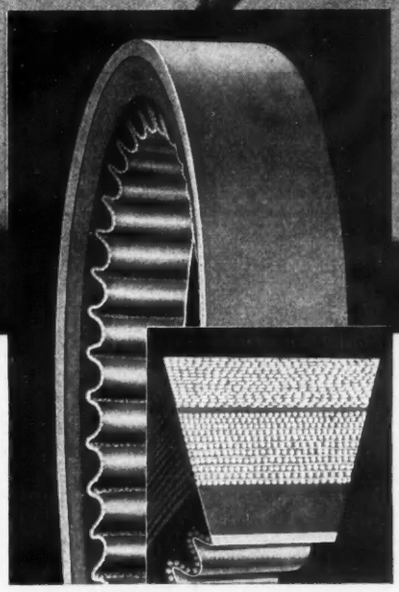
No Other V-Belt compares with Dayton for PULLING POWER



When the Dayton Cog-Belt exerts its brute strength—when it settles down in the pulley grooves with its bulldog grip—that's *pulling power!*

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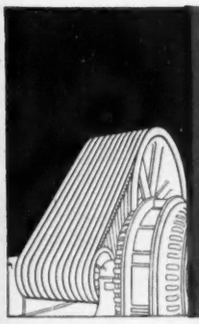


Dayton
COG-BELT DRIVES
MADE BY THE WORLD'S LARGEST MANUFACTURER OF V-BELTS

OKLAHOMA FIELDS

New Stephens County field appears important.

* * *

Open new area in Tillman County.

* * *

Grant wildcat is flowing by small heads.

Ardmore.—Two tests have opened new and important pools in southern Oklahoma. The deeper of the two is Carter Oil Company et al's Harley 1, C NE NE 24-2s-4w, which is considered the most important discovery well in this section of the state since Fox pool. The test is producing from Oolitic lime at 8175 feet after being treated with 5000 gallons of acid.

A flowing test through 2½-inch tubing was good for 302 barrels, which was about 2 barrels over the oil load used with the treatment. This test was for 2 hours, and during the third hour about 130 barrels was produced. The fourth, fifth and sixth hours flow produced an average of 120 barrels per hour and the well was shut in. During another test of 14 hours duration the well averaged 115 barrels per hour and did not show any drop in output after the head was off during the first hour. Gas produced with the oil was gauged at 42,600,000 cubic feet, and was sour. Gravity of the crude was checked at 57 degrees, corrected.

A casing pressure of 3600 pounds per square inch was recorded and a tubing pressure of 3500 pounds. Well is shut in at present for pipe line connection to Shell Pipe Line Corporation.

Location of the well is in the old Milroy pool, which is still producing from shallow sands. The sector is in eastern Stephens County, only a comparatively short distance west of Fox pool, western Carter County, in which the first Ordovician well was drilled. This first well, Carter Oil Company's Ruth Williams 1, was estimated around 15,000 barrels daily from lime of Ordovician age. Later testing in the vicinity of Ruth Williams failed to find the productive strata. The Harley well is on a separate geologic feature and is important to the entire Mid-Continent in centering interest on an area predicted of productive importance from deeper zones some years ago.

The well to share interest in the area with the Harley, and to make the week the most important in southern Oklahoma in 1937, is Indian Territory Illuminating Oil Company's Graham 1, NW SW NE 1-3s-19w, southwestern Tillman County, at which tanks are being erected preparatory to testing. Canyon lime was drilled to 3081 feet in the test and the hole filled with 38 gravity crude. Seven-inch casing has been set at 3073 feet. Observers confidently expect the well to prove a new lime proof when opened into storage sufficient for a test. At last report the well was slopping over.

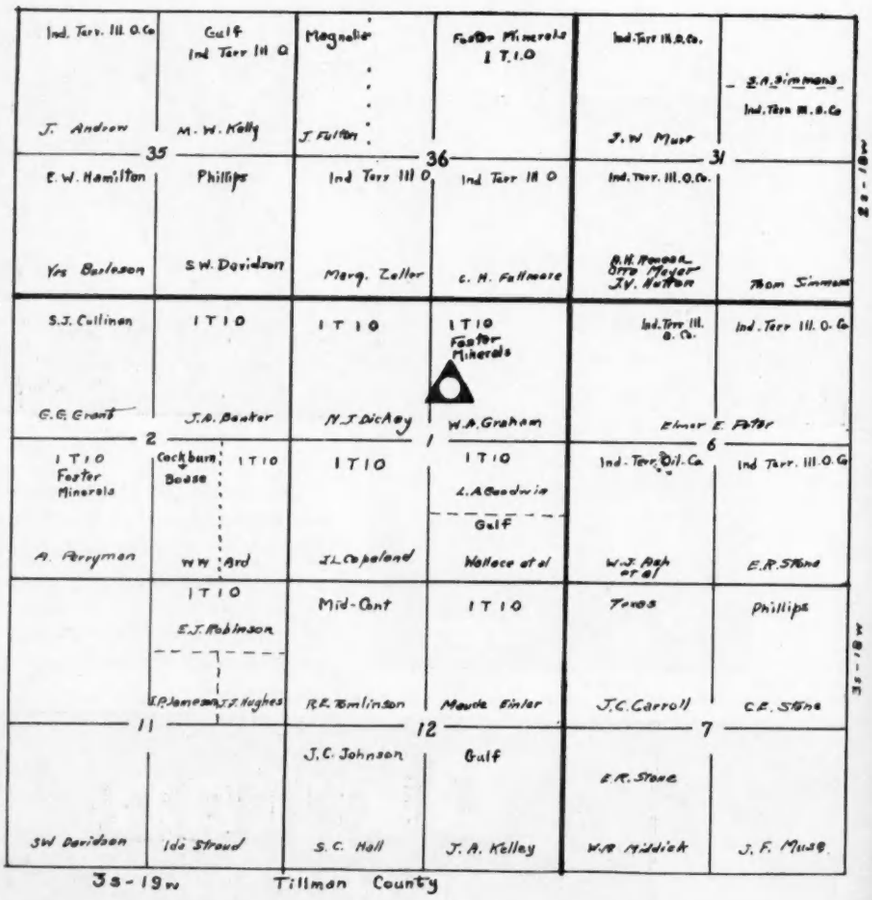
Deepen Doyle Well

In the Doyle sector of Stephens County, Helmerich & Payne's Wade 1-A, NE SE NW 12-1n-5w, the surprise gas well of the area, was deepened from 3731 to 3746 feet without either finding oil or increasing the 10,000,000 cubic feet of gas. Later, the well was plugged back to 3645 and the casing was perforated. No oil was made and the test has been shut in.

Gulf Oil Corporation's Johnson 1, C SW NW 27-2s-3w, in the Fox pool of western Carter County, is drilling below Hunton lime which flowed a show of oil and gas between 4739 feet, the top, and 4749 feet. Present depth is below 5100 feet. The same interest's Smith 1, C SW SW 26-2s-3w, has drilled through Woodford shale topped at 4190 feet.

Grant wildcat not as large as first believed

Oklahoma City.—The ranking wildcat in point of interest in western Oklahoma, Carter Oil Company's Crisman 1, C WL NE SW 16-25n-3w, southeast of Lamont, Grant County, is testing First Wilcox and not proving the production that was at first indicated. Following drilling of plugs, the well made small flows, showed some mud and considerable water, and stood with a fluid column in the hole. One flow after being shut in was for 10 barrels in 8 minutes. Top of the fluid was about 1800 feet off bottom of 5403 feet, and was bailed down to 1500 feet. Recovery was about one-third oil and two-thirds



Southern Oklahoma's recent strike of importance is in southwestern Tillman County, four miles east of Red River (Oklahoma-Texas line). It is Indian Territory Illuminating Oil Company and Foster Minerals Company's Graham 1, NW SW NE 1-3s-19w.—(Map courtesy Mid-Continent Map Company, Tulsa.)

water. The best flow the well made was for approximately 40 barrels in 12 minutes.

Operators are to run a photo-electric cell to determine exactly where the water is coming from, and may find it possible to cement off at least a portion of it. As the well is at present bottomed in the upper of first Wilcox, there is good possibility of finding production in the second strata of the Wilcox. Other areas in the general sector have found only slight indications of production in the upper section, but have proven for commercial production from the second Wilcox sand. If commercial crude is not obtainable at the present depth after a fair test, the well will probably be drilled to the deeper zone.

Sinclair Prairie Oil Company's Ford 1, SW NW SE 12-17-1w, northeast of the Langston pool of Logan County, is the latest test in the area to go into the Wilcox sand. The strata was topped at 5037 feet and drilled to 5081, present total depth. On first flow after almost a hole full of mud had been removed, the well made one head of about 50 barrels before subsiding. After a shut-in period the well made another head of about 40 barrels. Continued testing is in progress.

Continental Oil Company's Conway 7, 21-23n-2w, in the Billings field of Noble County, made 2060 barrels on test of 4 hours and 45 minutes. Mid-Continent Petroleum Corporation is starting a well in NW SW SW 27-23-2w.

OKLAHOMA

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CADDO COUNTY—		
English Drlg. Co., Abernathy 5, cse se 31-6n-9w	7	3406
CARTER COUNTY—		
Carter Oil Co., Perkins 4, nw se se 4-1s-3w	270	2970
C. F. Dillingham et al, Evans 1, ne nw sw 12-1s-3w	*	2705
Magnolia, Richards 71, ne ne nw 6-4s-3w	40	1156
Lon Thompson 13, se ne nw 9-4s-3w	15	1007
Snowden-McSweeney, Apple-Franklin 29, ne sw ne 9-4s-3w	9	1089
Sinclair Prairie, Ingram 3, se ne nw 16-4s-3w	*	2197
CLEVELAND COUNTY—		
Sinclair Prairie et al, Franklin 4, ne ne se 21-10n-2w	200	7233
COMANCHE COUNTY—		
J. A. Wolfe, Catinus 1, sw sw 30-4n-11w	*	115
CREEK COUNTY—		
Gulf Oil Co., Jemima 1, sw sw ne 3-17n-7e	16	2533
Pure Oil Co., Richards 10, nw se 4-17n-7e	106	2663
Emett Adams, Self 3, sw se nw 2-17n-12e	10	2057
Sinclair Prairie, Oates 4, sw sw se ne 14-19n-9e	33	1308
GARVIN COUNTY—		
Cox & Hammon, Craig 2, sw ne nw 32-1n-3w (pb 2380)	75	3017
Skelly Oil Co., Hinkle 1, ne nw sw 32-1n-3w	213	3175
HUGHES COUNTY—		
Cities Service, Born "B" 4, cnw¼ 20-7n-8e	31	2942
J. F. Smith, Scroggins 2, nw ne se 20-7n-8e	52	2935
JEFFERSON COUNTY—		
Circle Oil Co., Seay 48, ne se sw 3-7s-5w	50	1272
Long, Yingling & Laucks, Seay 22-nw ne se 3-7s-5w	25	1095
KIOWA COUNTY—		
Kiowa Oil Co., Fender 1, sw sw ne 4-6n-20w	*	1050
LINCOLN COUNTY—		
Summitt Drlg. Co., Clark 1, se sw ne 35-15n-2e	2016	5125
Cimmarron Oil Co., F. Ornor 1, csw se 31-17n-2e	*	5009
MARSHALL COUNTY—		
Neff and Godfrey, Chapman 1, sw se sw 36-4s-4e	*	3009
NOBLE COUNTY—		
Shell et al, Rupp "A" 1, se sw sw 30-21n-2w	*	5589
Continental, Conway 6, se se sw 16-23n-2w	2135	4287
OKFUSKEE COUNTY—		
English & Smith, Wade 1, nw se nw 11-11n-13e	*	1435
OKLAHOMA COUNTY—		
Magnolia, School Land 2, sw nw ne 36-14n-4w	28	6577
OKMULGEE COUNTY—		
Lease Inv. et al, Replogle 1, ne sw sw 4-13n-11e	764	3163
OSAGE COUNTY—		
Moorr et al, 3A, ne se ne 2-21n-8e	7	1259
Pure Oil & Sinclair, Prairie 174, nw se nw 5-23n-8e	27	2338
Lewis Prod. Co., 4, nw sw sw 27-24n-7e	161	2677
I. T. I. O., 7, nw se sw 13-24n-7e	*	2410
Continental 1, ne ne nw 29-24n-9e	*	2210
Kewanee Oil Co., 2, sw ne nw 33-26n-6e	75	3012
PITTSBURG COUNTY—		
Southwestern Utilities, Amos 1, nw nw sw 10-7n-18e	25.5	1950
Utilities, C. B. Bascomb 1, nw ne sw 10-7n-18e	23.5	1996
PONTOTOC COUNTY—		
Mid-Continent, Statler 6, ne ne sw 2-1n-7e	302	3762
Magnolia, J. Lewis 3, se sw sw 19-2n-7e	402	4009
Amerada, Wooley 17, nw ne se 21-2n-7e	2636	3660
Wooley 19, sw ne se 21-2n-7e	2905	3676
Mabee, Smith 4, nw sw sw nw 28-2n-7e	41	1350
Magnolia, Burris "B" 13, nw se ne 28-2n-7e	178	2550
Burris "B" 15, se se ne 28-2n-7e	179	2530
Smith 6, ne se nw 28-2n-7e	164	2570
Smith 7, se se nw 28-2n-7e	102	2470
Wooley 7, nw ne ne 28-2n-7e	304	2600
Stahl et al, Dennis 2C, nw ne nw 28-2n-7e	102	2628
Ramsey, Johnson 2, sw nw se 9-3n-7e	*	1600
SEMINOLE COUNTY—		
Malernee, Flowers 3, se se sw 29-7n-6e	125	2995
Winona & Cities Service, S. Keys 1, nw ne ne 19-7n-8e	203	3016
Wrightsman, Taylor 1, se sw ne 35-10n-7e (pb 3654)	*	3664
STEPHENS COUNTY—		
Geo. L. Pace, Allen 12, se se ne 3-2s-8e (pb 2190)	8	2205
TULSA COUNTY—		
L. L. Boyd, A. Nive 1, nw nw nw sw 25-18n-14e	7	1352
Johnson Oil Ref. Co., Bailey-Grimes 6, sw se sw 31-19n-10e	315	2287
Mid-Continent, Koontz 2, se sw ne 9-19n-12e	¶1.5	1623
WAGONER COUNTY—		
I. E. Pitts, Hayne 1, nw nw ne 20-17n-15e	*	1885

*Failures; †Junked; ¶Million cu. ft. gas.

Index to Field Development News

Area	Page
Arkansas	184
California	188
Eastern States	166
Kansas	162
Louisiana Coast	182
North Louisiana	183
Michigan	187
New Mexico	184
Oklahoma	160
Rocky Mountains	186
Southeast States	184
East Texas	173
Texas Gulf Coast	180
West and North Texas	170
South Texas	176
Wildcat Drilling Report	189

New field found in Seminole County

Tulsa.—The east half of Oklahoma was comparatively quiet during the past week in comparison with other sectors of the state. A new pool has apparently been opened in extreme southern Seminole County by Stanolind Oil & Gas Company and Amerada Petroleum Corporation's Salina 1, SE NE NW 4-5n-6e, southeast of Konawa. Hole is bottomed at 3317 feet in Simpson Dense with casing set at 3184. After the plug was drilled the test showed oil and sulphur water after standing for 12 hours. On swab test the well showed 300 oil in 8 hours with considerable water.

Magnolia Petroleum Company's McMoran 1, SWc NW 32-11-5e, northern Pottawatomie County, recently swabbed 160 barrels of oil in 24 hours and nearly as much water. Depth is 4853 feet in the second Wilcox sand. Operators plan to plug back a foot or so to try to shut off water. Apparently, the test is located either on the flank of a low-lying structure, or on a very slight domal lift.

Four tests are drilling or testing in the vicinity of Fitts pool without showings of importance. Roodhouse's Booth 1, SR NW SE 20-2n-6e, west of Fitts pool, is testing from 4965 feet and swabs or bails from 40 to 60 barrels per day. The test was drilled into the pay a month ago.

R. S. Nash, drilling a wildcat test that is attracting attention of southern Oklahoma interests, is testing Wilcox after obtaining a show of oil at 4045 feet. Well is Miller 1, C NL NE SE 29-6-3e, south of the Wanette area of southern Pottawatomie County.

Mid-Continent Petroleum Corporation's Ne-Thah-Pea-Se 1, SE NE NE 24-11-4e, a northern Pottawatomie test, made 95 barrels flowing 11 hours and is rigging up pumping equipment.

In the Centrahoma area, Carter Oil Company's Claytor 1, C NL NE SW 27-2-9e, proved Cromwell for an estimated 10,000,000 cubic feet of gas at about 4870 feet. No oil was showing, and after more complete testing the well is drilling ahead. Same interest's Hamilton 1, C WL NE SW 33-4n-9e, southern Hughes County, was given third shot of acid through casing perforations between 5755 and 5784 feet, and swabbed 159 barrels.

The test of Kinta anticline being drilled by Continental et al, is still drilling Cromwell sand after having passed through a slight oil show near the top of the strata. Hole is being made below 6119 feet. Location of the wildcat is on the Haskell County side of the structure, in SWc SE NE 33-8n-20e.

40 new Oklahoma wells

Tulsa.—Completions ran ahead of well starts in Oklahoma last week, 56 to 43. This completion total included 40 oil wells with initial output of 14,338 barrels, 3 gas wells, and 13 dry holes. Locations staked were in the following counties: Caddo 7; Comanche 1; Creek 5; Grady 1; Hughes 1; Jefferson 1; Lincoln 2; Logan 2; Marshall 1; Noble 2; Okfuskee 1; Oklahoma 1; Okmulgee 2; Osage 2; Pontotoc 8; Pottawatomie 2; Seminole 1; Stephens 3.

KANSAS FIELDS

Two new fields opened in Stafford County.

* * *

Siliceous lime produces at Comanche.

* * *

Deepening helps Barber County field opener.

Wichita.—Operations in Kansas apparently have hit a level of success unequaled during the past year, and only slightly below last week in the importance of initial showings. A new pool in southeast Stafford County has been opened by Stanolind Oil & Gas Company et al's Harnett 1, NW NW SE 23-24-11w, which is showing very good saturation in Simpson formation topped at 3795 and cored from 3802 to 3808 feet. Kansas City lime was topped at 3395 feet. Casing has been set at 3802 and the well is to be given a test.

Torrey & Feaster's (was Newman et al's) Winemiller 1, NEc 33-21-12w, northeast Stafford County, topped Kansas City lime at 3407 feet and drilled to 3414 feet. The well made 265 barrels during an hour flow, and a total of 540 barrels was produced naturally during 8 hours.

Both these potential openers are in Stafford County, southwest of the trend of development along the flank of the Central Kansas Uplift.

Continental Oil Company proved another strata productive in Comanche pool of Rice County when Cramm 1, SE SE NW 15-19-19w, went into Siliceous lime. Top of the new pay was cut at 3192 feet, and from 3202 the hole filled 1500 feet. When drilled deeper the oil increased. Present production in the pool is coming from Kansas City lime. The same firm's Johnson 1, NEc SE NW 12-18-18w, between Micheals and Geneseo pools of Rice County, looks like a joiner well after having filled 3000 feet from Siliceous at 3193 feet.

Bridgeport Machine Company's Habiger 1, NW NW NE 5-18-10w, northwest Rice County, on trend between Stumps and Bloomer pools, was given another test late in the week. Flowing from 3005 feet in Lansing lime, the well made 240 barrels in three hours natural. Crude is clean and tests 46 gravity. Gas volume exceeds 12,000,000 cubic feet. It is intended to acidize before taking another test. Continental Pipe Line Company has a connection to the wildcat. The successful completion of this well, evidently linking the two named pools, adds 2000 acres to the semi-proven area.

Atlantic Refining Company, Cities Service Oil Company and Skelly Oil Company's Runyon 1, SW NW NE 11-27-13w, near Iuka in Pratt County, which showed for an oil pool for the county, is being tested and will probably be deepened from Simpson. Present depth is 4311 feet. On a test following treatment with 1000 and 3000 gallons of acid, the well made 81 barrels of oil per hour, averaging 5 barrels net, for 4 hours. In a 9-hour test the well made 45 barrels.

The efforts to find flanking production along the sides of Medicine Lodge dome of Barber County, proven early in the year, have been given added impetus by Barbara Oil Company's Holmes 1, E½ SE 15-33-13w, which is an old completion in Viola lime at 4845 feet. On original test the well made a potential of 441 barrels for 24 hours with an estimated one to two million cubic feet of gas. Completion was April 14, 1937. Last week the well was deepened from 4845 to 4851 feet and flowed 512 barrels through casing with tubing in the hole. Two other tests are active, one drilling below 3500 feet and the other a rig.

Ness County Active

Activity west of the Central Kansas uplift is centered in west Ness County, where 5 active operations are under way. All locations are on the Beeler anticline, a prominent geologic feature of the vicinity, and are considered on semi-proven acreage. Two pools, the Aldrich and Thompson, have already been proven for the area. Siliceous lime and basal Conglomerate are both productive, the crude ranging from 33 to 36 degrees gravity. Although there is no established outlet, considerable oil is shipped by trucks to Kaw Pipe Line connection. Past drilled wells indicate a structure of comparatively large extent, and the present activity is significant in pointing toward a new area of exploration, particularly if the present tests complete as large producers.

Carter Oil Company's Hergert 1, C NL NE SE 26-18-16w, the recent extensioner to oil production at the southern edge of Otis pool, Rush County, made 1428 barrels flowing from Regan sand at a total depth of 3553 when tested early in the week. The well brings about 1500 acres into the play.

Shell Petroleum Corporation's Batt 1, SE SE SE 35-15-14w, 1½ mile extensioner to Trapp pool of Russell County, was acidized at 3298 feet in Siliceous lime with 3000 gallons under a load of 68 barrels of oil. On a 10-hour swabbing test following treatment, the well made 235 barrels on August 24 through 4¾-inch pipe, and on the following day another 10-hour swabbing test produced 231 barrels. Derrick is being torn down and a pumping front installed.

Republic Gas Company's Bloomer 1, NE NW NW 14-17-11w, another extensioner of last week's activity to the Trapp pool, about ½ mile southeast of production, pumped 250 barrels in a 6-hour test from Siliceous lime at 3338 feet after 1000 gallons acid. A potential of 1128 barrels per day has been established.

Important prospects are drilling at semi-important stages in west Kansas. South of Otis, in the Greenwalt sector of Rush County, Westgate-Greenland Oil Company's Greenwalt 1, 20-19-16w, is below 3550 feet after topping Lansing lime at 3460 feet. Hole is nearing the level of the Regan sand as found in Otis field, but which will probably be lower at the location of Greenwalt 1 if it is at all present. Another test, drilled on the C SW 17-19s-16w in 1931 showed for 400 barrels per day from Siliceous at 3263 feet, but due to lack of outlet was not produced.

Stanolind Oil & Gas Company's Kowalsky 2, NW SW NE 11-20-11w, ¼ mile south of Kowalsky production, Barton County, topped Siliceous lime at 3278 feet and found good saturation after drilling 9 feet into the pay. An attempt to further extend production of Cunningham pool to the southwest in Skelly Oil Company's Adams 1, NW NE 2-28-11w, Pratt County, was apparently doomed when water showed with some oil in Lansing lime at 3541 feet after drilling plug. The test will be deepened.

K. D. Holland's Brothers 1, SEc 12-21-7w, reported last week as extending production in Hauschild pool 1 mile to the east, made 80 barrels flowing from Siliceous lime at total depth of 3462 feet, a correction of minus 5 feet to bottom. The well stopped its flow and swabbed 150 barrels in 4 hours. The well will be deepened and another test made. An offset is spotted.

Magnolia Petroleum Company's Freeman 1, SE NW SW 3-31-6w, a rank wildcat in northeast Harper County, has been abandoned at total depth of 4896 feet in Siliceous lime. At this depth the hole filled 640 feet with sulphur water and no oil.

Deep Rock Oil Corporation and H. M. Gries, trustee, have been completing large wells in Bemis pool of Ellis County. Interest's Baumer 2, NE NW NW 27-11-17w, flowed 705 barrels in 5 hours, and Baumer 3, SW NW NW of the same section, flowed 877 barrels on a 6-hour retest. Two other operations of the firm in the pool are drilling below 3000 feet, and one well is taking potential.

New Fields in East Part

Operators in the east part of the state have been busy, and have opened two new areas to further development. H. L. Mourer et al's Draper 1, NE NE NW 10-24-17e, in the Neosho Falls

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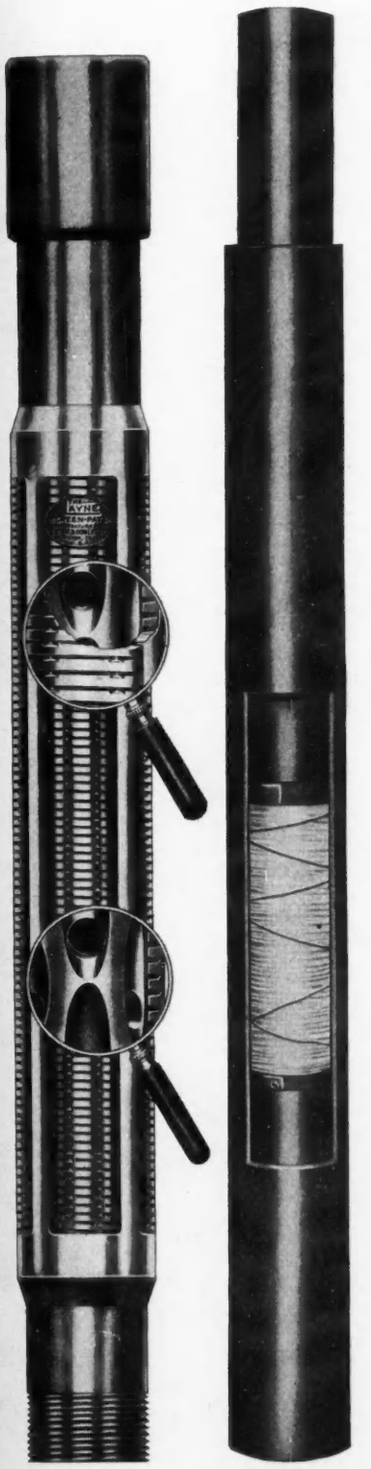

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district of Woodson County, which was to test during the week after acidizing the first break in Mississippi lime at 1203 feet, was unable to obtain a good shut-off on casing. The pipe is reset and treatment and test are to be made shortly. The well showed for a producer with crude filling casing from the break. Irvin Katz of Eureka has completed two extension wells to the northwest of Reese production, west central Greenwood County. Both producers appear to be good for 75 barrels, one from the first break in Mississippi lime at 2118 feet, and the second from Lansing lime at 1380 feet. Other wells are drilling in the area.

An offset to the discovery well of McCullough pool of southeast Butler County, about 14 miles southeast of El Dorado, was completed for 495 barrels from Wilcox sand at 3186 feet, with total depth at 3181 in the same strata. Well is National Refining Company's McCullough 2, NW SE 1-28-6e. The offset made only 73 barrels on potential.

HILARION N. BRANCH, in charge of the legal department of Huasteca Petroleum Company (Standard Oil Company of New Jersey) has returned to Mexico City after an automobile trip to California. He was accompanied by Mrs. Branch.

Mapping the Way for Oil
In South Texas

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AERIAL PHOTOGRAPHIC MAPS and photograph-controlled **REGIONAL SURVEY MAPS** of the entire South Texas Area lying east and south of the Balcones Fault Zone.

OWNERSHIP MAPS, Photograph-Controlled, in South Texas

COUNTIES COMPLETED:

ATASCOSA	JACKSON
BASTROP	JIM HOGG
CALDWELL	JIM WELLS
COLORADO	KARNES
DE WITT	LIVE OAK
DUVAL	SAN PATRICIO
HIDALGO	STARR

COUNTIES NEARING COMPLETION:

FRIO	WEBB
McMULLEN	ZAVALLA

» **Full Details on Request** «

EDGAR TOBIN AERIAL SURVEYS

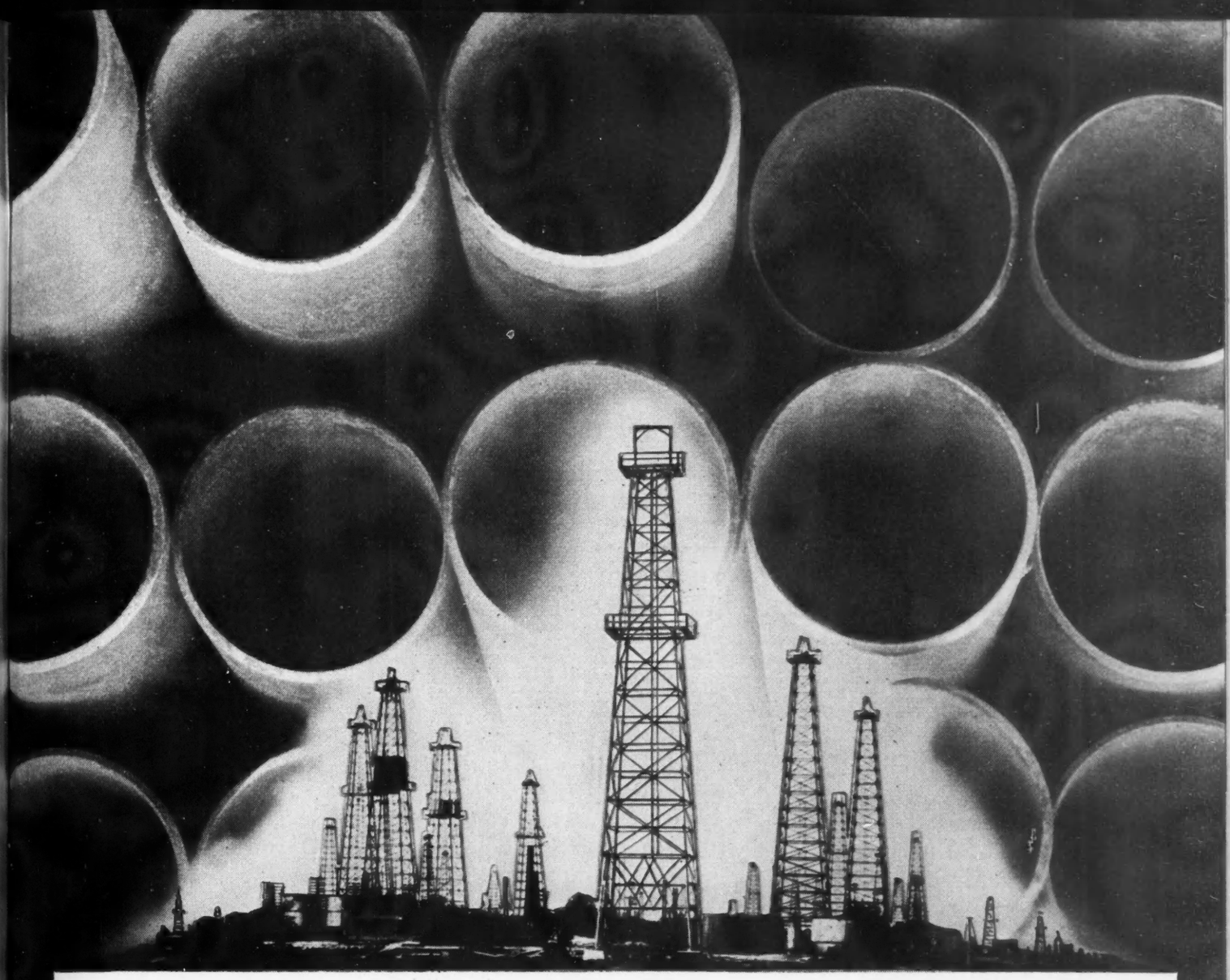
SAN ANTONIO **HOUSTON**

KANSAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARTON COUNTY—		
Continental, Ainsworth 5, nw se ne 33-16n-13w	1198	3515
Stanolind et al, National Bank 1, se se sw 36-16s-13w	*	3425
Transwestern, Meyers 3, se ne ne 13-17s-11w	968	3185
S. A. Murphy, Beck 1, ne ne ne 17-17s-12w	*	3419
Texas, L. Hoffman 3, nw ne nw 6-16s-13w	1890	3356
BUTLER COUNTY—		
Phillips, Scully 17, nw sw ne 17-23s-4e (pb 2025)	267	2072
Jayhawk Oil, Fitch 2, nw nw ne 5-25s-4e	5	2741
National Ref. Co., McCullough 2, nw nw se 1-28s-6e	495	3181
CHAUTAUQUA COUNTY—		
Sagamore, Cunningham 1, se se sw 8-32s-11e	¶1.25	1454
Sinclair Prairie, Casement 48, se nw sw 32-33s-11e (pb 1845)	15	1850
COWLEY COUNTY—		
A. Brewer & Co., Feaster 1, se nw sw 36-32s-5e	*	3520
ELLIS COUNTY—		
Lario, Romine 1, nw sw nw 18-11s-16w	1685	3317
Sinclair, Cress 1, ne se ne 13-11s-17w	1344	3333
Deep Rock, Baumer 10, sw ne nw 27-11s-17w	3166	3426
Baumer 13, se ne nw 27-11s-17w	2971	3501
Wentz, Bemis 4, se se nw 28-11s-17w	2434	3429
Amerada, E. Shutts 1, se sw ne 6-12s-17w	*	3923
Lario, Koerner 1, ne nw sw 11-12s-18w	1199	3689
GRANT COUNTY—		
United Prod., Julian 1, cnw¼ 26-30s-35w	¶3.5	2583
Panhandle-Eastern, Taggart 1, c of section 11-30s-37w	¶2.75	2885
Towles 1, cse n½ n½ 26-30s-37w	¶5	2850
GREENWOOD COUNTY—		
7-11 Oil Co., Evans 2, c nw¼ 7-22s-10e	20	2435
HARVEY COUNTY—		
Derby, Lehman 1, sw sw nw 13-22s-2w	1635	3314
Shafer et al, Epp 1, ne ne se 15-23s-3w	*	3915
Palmer, Schreg 1, nw ne nw 31-23s-3w	804	3368
McPHERSON COUNTY—		
Continental, Hetzke 8, cne ne sw ne 29-21s-1w	752	3326
Continental et al, Huxman 3, c ne ne se nw 29-21s-1w	572	3275
Imo O&G, Watkins 1, se se se 14-22s-7w	*	3560
RENO COUNTY—		
Sinclair Prairie, A. Heflin 3, ne se se 8-24s-4w	445	3375
RICE COUNTY—		
Stanolind, Mitchell 9, se nw sw 32-19s-10w	487	3306
Phillips et al, Hubenett 1, sw ne sw 23-20s-6w	400	3378
Ohio Oil, F. M. Proffitt 3, sw nw se 18-20s-9w	496	3353
Sage & Yankey, Gossman 8, ne nw ne 9-21s-7w	620	3370
Reserve Dev. Co., H. R. Patton 85, se ne nw 16-21s-7w	596	3430
RUSSELL COUNTY—		
Phillips, Downing 2, sw se sw 19-13s-14w	1176	3275
Empire, Vaughn 3, nw sw sw 17-14s-14w	1290	3056
Lario et al, Waudby 1, se se ne 26-14s-15w	500	3183
Carter, Josephine 3, se ne se 7-15s-13w	1704	3231
Carter Oil, Detrich 2, se sw sw 8-15s-13w	2393	3189
Coralena, H. Sellens 1, se ne nw 30-15s-13w	2886	3283
Empire, Boomhaur 6, nw sw ne 25-15s-14w	1562	3316
Boomhaur 7, ne se se 25-15s-14w	1290	3310
STEVENS COUNTY—		
Panhandle-Eastern, Youngren 1-8, se sw sw 8-32s-38w	¶7.8	2739
Benedum & Trees, Watkins 1, cnw¼ 34-34s-38w	¶5.7	2850
WOODSON COUNTY—		
Lilly et al, Wall 1, sw se se 25-25s-13e	*	1475
Becker Bros. et al, Bonner 1, ce½ nw sw 34-25s-14e	*	1560

*Failures; †Junked; ¶Million cu. ft. gas.



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YOUNGSTOWN

Labor

[Continued from page 29]

mission, stated that it would be economically impossible for them to continue operating in Mexico if the recommendations of the commission were forced upon them.

Executives of oil companies operating in Mexico last week were meeting in New York to discuss the situation, but following the conferences, they issued no statements as to their future course.

New Contract Pending

Employees of the Indian Territory Illuminating Oil Company, in Oklahoma, affiliated with the C.I.O., propose to make their demands for higher pay and shorter working hours when the present contract with the company expires in the near future, and when a new contract is worked out. Official information was not available as to the demands, but it was reported that they would call for a closed shop, the 36-hour week, and a 1929 wage scale.

Recognition Sought

Representatives of the C.I.O. are scheduled to meet soon at Okmulgee, Oklahoma, with W. B. Pine, and the C.I.O. union will seek to be recognized as the bargaining agency for the employees of that operator.

Pine has employees at Seminole, Wewoka, Sasakwa, and at Okmulgee. A representative of the C.I.O. claims that 75 percent of the operator's employees have signed a petition stating that they were ready to recognize the union as their bargaining agent. The C.I.O. representative said that the union did not represent the Pine workers at Okmulgee, but that all 70 employees of the operator at Seminole, Wewoka, and Sasakwa have signed the petition designating the C.I.O. as their sole bargaining agent. The C.I.O. representative predicted that unless an agreement is reached within 30 days, there will be a strike of the employees at Seminole, Wewoka, and Sasakwa. In such case, he said, the plants where they work would be shut down.

A trial examiner for the National Labor Relations Board, at Fort Worth, Texas, August 25, recommended reinstatement of 14 employees of the Waggoner Refining Company, who were discharged because of union activity, according to an allegation of an oil field union.

EASTERN FIELDS

Completions

KENTUCKY

Company, Well and Location	Init. Prod. Bbls.	Depth
BUTLER COUNTY—		
Fred Helt et al, J. B. Mefford 1...	*	724
DAVIESS COUNTY—		
Ashby et al, Burton Heirs 6.....	15	812
H. C. Davis et al, Herbert Salmon 6	*	1038
HANCOCK COUNTY—		
Chester Oil Co., J. W. Baughn 7..	50	....
J. W. Baughn 8	50	311
Davis & Young, Alton Mason 4....	20	650
Grovely Oil Co., Baker Bros. 3....¶1.18		550
Hume et al, Wm. DeWitt 1.....	¶.33	519
J. C. Ellis, Hallie Mason	¶.38	547
R. A. Richards 14	*	....
C. D. Walker, Ellen House 2.....	*	728
KNOTT COUNTY—		
Inland Gas Co., E. A. Hammonds 1	¶.88	3160
K. C. Kilgore 2	¶.15	3072
McLEAN COUNTY—		
W. Sargent et al, D. & S. Butterfield 4	2	1414
South Penn Oil Co., H. K. & John Kirtley 1	2	1404
METCALFE COUNTY—		
Doc Barmeck et al, J. B. Lane....	*	2140
OHIO COUNTY—		
Whitehouse Oil & Gas Co., Callie S. Lloyd 3	¶.32	509
Doc Serman, Nancy Farmer 28....	10	....
Cox & Acton, Allen Johnson 3 ...	¶.86	1160
POWELL COUNTY—		
Geo. B. Frelleson, E. W. Baker 2..	3	....

*Failures; †Junked; ¶Million cu. ft. gas.

OHIO

Company, Well and Location	Init. Prod. Bbls.	Depth
ASHLAND COUNTY—		
Robinson et al, H. E. Young 5....	¶.10	662
ATHENS COUNTY—		
E. Gibson et al, S. Copeland 1....	¶.36	760
Ohio Fuel Gas Co., Floyd Hartley 1	¶.03	1642
BELMONT COUNTY—		
Huntman & Peters, James Skinner 1	¶.70	1370
CARROLL COUNTY—		
Shearer & Harding, R. M. George, Sr. 1	2	1175
GUERNSEY COUNTY—		
Moss & Yaus' D. S. Gibson 1.....	¶.23	1225
John Bindas, P. W. Camp 1.....	*	1144
KNOX COUNTY—		
Preston Oil Co., R. L. Jones 1....	55	3135
Ohio Fuel Gas Co., James Hoyman 1	¶.37	3080
LICKING COUNTY—		
Pure Oil Co., Geo. Madden 15.....	80	2980
I. I. Hazlett et al, Jacob Kreager 1	20	3080
McClay Bros., J. H. Orr 1.....	¶.35	2317
Wehrle Gas Co., Ben Jones 1.....	¶.06	2336
John Murphy 2	*	1430
Hazlett & Larrick, J. L. Iden Heirs 1	*	3130
MEDINA COUNTY—		
E. R. Edson & Son Co., M. A. & Eva Franks 47	*	497
Henry Dempsey, N. Lance 1.....	¶.37	3121
MEIGS COUNTY—		
T. W. Bengal, Albert Heilman 4...	¶.96	378
Roy Holmes, Elias Jividen.....	¶.32	2150
Peoples et al, S. M. Russell Jr. 1..	*	690
MONROE COUNTY—		
N. T. Staudt et al's J. S. Jackson...	3	1448
MORGAN COUNTY—		
Speary Oil & Gas Co., Geo. Starling	¶.33	930
MUSKINGUM COUNTY—		
Edward H. Everett Co. et al, Ella C. Hill 3	65	2980
NOBLE COUNTY—		
White Oil Co., F. C. Schneeberger 1	*	970
STARK COUNTY—		
Frank Lyons et al, E. A. Laugenbach 1	¶2.0	3870
Shaub Heirs 1	¶1.5	3850
TUSCARAWAS COUNTY—		
Natural Gas Co. of W. Va., Geo. C. Evans 1	*	4805
WASHINGTON COUNTY—		
Ray Dewitt et al, Munn Fisher 4..	2	857
Otto Heldman et al, Ernest Epler 4	¶.13	1136
H. F. Trechell, H. F. Trechell 16..	¶.04	1180
D. R. Greenlee et al, James Dow 1	*	1910

WEST VIRGINIA

BOONE COUNTY—		
Owens-Illinois Glass Co., Little Coal Land Co. 18	¶.25	2608
CABEL COUNTY—		
DeJarnette Gas Co., J. H. DeJarnette 4	¶.55	3306
Merritts Creek Gas Co., C. H. Thornburg 1	¶.07	3065
CALHOUN COUNTY—		
Hope Natural Gas Co., J. M. Bennett 7771	¶1.7	1806
DODDRIDGE COUNTY—		
W. C. Gribble, S. W. Stuart 1.....	¶.1	2780
GILMER COUNTY—		
Massey & Jarvis Drilling Co., O. K. Wilfong 1	¶1.25	1580
Ludwic Oil & Gas Co., Earl E. Beall 2	¶.70	1639
HANCOCK COUNTY—		
R. J. Braden Co., J. C. Hamilton 15	2	1085
KANAWHA COUNTY—		
United Fuel Co., Kanawha Valley Bank 4724	¶13.1	4991
Columbian Carbon Co., Mandy Wolfe 1	¶8.68	5156
Rome C. Cavender 1	¶2.15	4930
LINCOLN COUNTY—		
Sand Creek Gas Co., Phillip Hager 2	20	1507
Kanawha Gas & Utilities Co., Ira Burger 1	¶.55	3161
Huntington Development Co., W. E. Madden 260	¶.03	3933
PLEASANTS COUNTY—		
W. J. Bell, John Markey 1.....	*	959
RITCHIE COUNTY—		
P. N. Rinehart, N. E. Moore 9...	¶.25	1700
ROANE COUNTY—		
Reedy Oil & Gas Co., Maggie Miller 2	10	1810
TYLER COUNTY—		
L. C. White & Son, James W. & M. Dearth 1	*	1865

*Failures; †Junked; ¶Million cu. ft. gas.

Lucey
BOILERS
(see opposite page)
Distributed throughout the Mid Continent and Gulf Coast by
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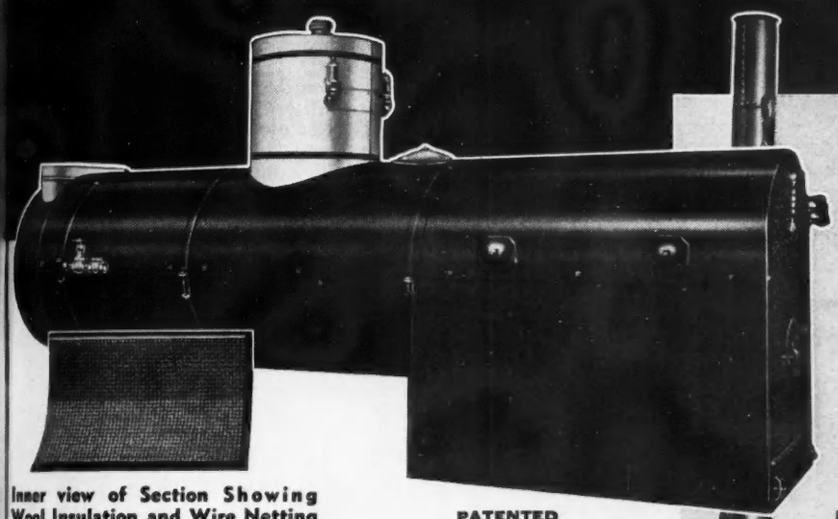
Get Your Boilers Ready for WINTER

MORE HEAT at Lower Cost when you install LUCEY Steel Jacketed Boiler Insulation



Inner view of Section Showing Wool Insulation and Wire Netting

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Saving in Fuel—10% and Up.
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Pays for Itself in One Year Through Savings.
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LUCEY BOILER and MANUFACTURING CORPORATION

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Natural gas air conditioning and floodlighting used

Ada.—Many features make the new building of Southwest Natural Gas Company of Ada, Oklahoma, outstanding. Year 'round air conditioning and flood lighting with natural gas are featured. Although the outside dimensions are only 60 feet by 70 feet, ample space is provided for the division offices and meter repair shop for this district, which serves 7000 consumers in eight towns.

The front of this Spanish type building is finished in white stucco, surmounted by a light grey cast stone coping. The roof is of red tile, as is the decorative panel beneath the two large plate glass windows.

Air conditioning is supplied by a unit that contains the filter, heating radiator, cooling coils, humidifying unit and circulating fans. A natural gas ice machine equipped with an evaporative condenser is used to handle the refrigerant for cooling. Steam for heating is supplied by a natural gas fired boiler. The shop, which is not air conditioned, is heated with fan type circulating heaters suspended from the ceiling.

Two 3000-candlepower natural gas flood lights, placed just inside the front parking, illuminate the exterior of the building.

Special attention was given to the meter shop floor plan. The arrangement used was decided upon by shop employes after visiting the meter shops of leading gas companies in the Mid-Continent. It allows the work to be carried out efficiently with a minimum amount of confusion.

The picture at the top shows Southwest Natural Gas Company's new building at Ada, Oklahoma, which is air conditioned and floodlighted with natural gas. The lower interior view shows the meter repair shop in this building, which is arranged for efficient work with minimum of confusion

NORTH AND WEST TEXAS

Permian Basin wildcats show in three spots.

* * *

Yoakum County has many fields or one big one.

* * *

Ordovician test in Crane County shows adversely.

Midland, Texas.—Extensive wildcat operations carried on in the north portion of the Permian basin registered favorably in three counties, with possibilities of important production resulting from some of these strikes and extensions. Yoakum County strengthened its position as an oil source with three prospects flowing or showing oil, while Hockley and Dawson counties each have their second oil producers in process of completion.

Production in the Slaughter pool, southwestern Hockley County, was extended 2 miles to the southeast when Stanolind Oil & Gas Company's Alex Slaughter 1, C SW Labor 76, League 37, Zavalla County School Lands, filled 2800 feet with oil from brown sandy-lime at 4940-4975 feet. The well will be swabbed, then acidized. Top of lime was logged at 4150 feet, or 632 feet sub-sea, being 8 feet higher on structure than The Texas Company et al's Slaughter 1, discovery producer, which made 502 barrels potential after using acid twice. The latter spotted the water table in drilling to 5030 feet, and was plugged back to 5023 feet, or 1463 feet sub-sea. The new well is about 4 feet higher on top of the pay, according to owner's correlation. The supporting block of 1000 acres was purchased early last April for $60,000, including 50 percent cash and balance from production. Offsets will be required of Honolulu Oil Corporation and Humble Oil & Refining Company.

More Dawson County Testing

Northwestern Dawson County is assured of additional exploratory tests since Ernest L. Wilson, Atlantic Refining Company et al's Scanlan 1, C NW NW EL&RR Co. Section 83, Block M, developed 1300 feet of oil and small amount of water in drilling to 4960 feet. Top of solid lime was logged at 4460 feet, with an elevation of 3111 feet. Oil showings were recorded at 4836-50 feet and 4902-09 feet, with best increase at 4945 feet. It is about 4½ miles west of Ray Albaugh et al's Robinson 1, only producer in the county, but lacking sufficient oil yield to justify regular pumping operations. Wilson, W. L. Pickens and Thornton Lomax retained lease interest in only 320 acres of their original block. Atlantic Refining Company paid $25,000 cash for 800-acre spread and ⅜ interest in the 80-acre drilling site and a free test, and later paid the above group $10,000 for additional acreage. Geological markers on the Robinson discovery are in dispute, but those logged by Scanlan 1 can be correlated sufficiently to indicate that both wells are on the same geological feature.

Yoakum County Progressing

Progress made by southwestern Yoakum County prospects within the past week point to the eventual development of a chain of closely related fields, else an unusually large field. Bohago Oil Corporation and Bond Oil Corporation's M. West 1, C SE NW Section 606, Block D, northern test and about 8 miles west by north of the Bennett field, flowed 77 barrels of 31.6 gravity oil by heads in 23 hours after 2-stage acid treatment of lime section at 5163-5255 feet, with an elevation of 3660 feet. The well swabbed 5 barrels hourly after second treatment with 6000 gallons of acid. Standard Oil Company of Texas has moved in equipment to drill Sawyer 1, C SE SE Section 576, about ¾ mile to the northwest, due to short term lease.

Moore Brothers Corporation et al's Geo. Cleveland-Ohio 1, NEc Section 706, about 3½ miles southwest of the above Yoakum County wildcat producer, cored oil saturation at intervals below 5215 feet, and samples at 5302-29 feet were considered favorable for production. Top of brown lime was called at 4060 feet by owner, and the elevation is 3624 feet.

Denver Producing & Refining Company's Whittenburg 1, C NW NW Section 831, about 4½ miles southeast of Cleveland 1 and 6¼ miles northwest of the Wasson field discovery, showed free oil from lime at 4960-5015 feet. It was treated later in the week with 4000 gallons of acid, and flowed 15 barrels fluid per hour, including about 50 percent oil and remainder acid water and drilling fluid.

The Texas Company's W. F. Walker 1, C SE SE Section 794, about 3½ miles west of Whittenburg 1, is higher structurally, having topped solid lime at minus 794 feet as compared to a minus of 757 feet on this marker by the latter. Walker 1 logged first trace of oil at 4921-25 feet, with an elevation of 3644 feet, and was fishing drill pipe at 4963 feet.

Northwest and west outposts for the Wasson field, Gaines County, are having difficulty in making producers. Phillips Petroleum Company and I. T. I. O. Company's Brand 1, SE SE NE Section 55, about 1⅝ miles northwest of production, swabbed dry after yielding 57 barrels oil in 20 hours at 5011 feet, or minus 1426 feet, and has been given two-stage acid treatment. It was originally treated twice with acid at 4927 feet, but failed to make a commercial producer.

Plug-back operations have been completed on two west outpost tests in the Wasson area by Amerada Petroleum Corporation after encountering formation water at bottom. Matthews 1, NEc Section 417, 1¼ miles southwest of the discovery, used acid twice at 5018 feet, or 1461 feet below sea level, and on the last test swabbed 140 barrels fluid, 85 percent oil, in 16 hours. Hole has been plugged back to 5000 feet. The company's Armstrong 1, C NW NW Section 456, situated 3 miles to the west, drilled into water at 5071-79 feet, with an elevation of 3612 feet, then plugged back to 5060 feet. Tubing packer was installed at 5024 feet to use 2000 gallons of acid below the packer. Both of these outposts found water above and below the oil level. Drilling operations have been started on Amerada Petroleum Corporation's Brand 1, SEc N½ Section 54, Block AX, making the sixth project for the company on short-term leases in the Wasson area.

Gaines County Reversal

Outlook for oil production on the E. H. Jones land in northwestern Gaines County became more remote when Argo Oil Corporation's Jones 1, C NE PSL Section 2, Block A-7, drilled 7 feet into water, topped at 5247 feet, or 1578 feet sub-sea. Small amount of water appeared at 5096-5116 feet, followed by a nominal volume of free oil with water from above at 5125 feet. Continental Oil Company's Jones 1, about 4¼ miles to the south by west, has plugged to 4815 feet after testing bottom-hole water with a little oil at 5156 feet. Acid treatments at 4959 feet and 5040 feet failed to make a producer.

Exploration of a 4200-acre block assembled last spring, centering about 4 miles southeast of Seminole, Gaines County, has been started by R. H. Gill et al to comply with contract. Location is on the Simpson tract, near NE NW NE PSL Section 8, Block C-44, about 3½ miles east of a recent failure on the Fasken land.

Sand Hills Ordovician proving irregular

San Angelo, Texas.—Ordovician horizon in the Sand Hills field, Crane County, is providing irregular structural conditions that detract from earlier forecasts on the production possibilities of this lower oil and gas zone. Adverse development arose early last week when Loffland Brothers Company's J. B. Tubb-Gulf 3, NEc PSL Section 9, Block B-27, about 1½ miles east by south of a big producer, failed to show any appreciable amount of oil or gas with its sulphur water yield

when given an extended swabbing and bailing test at 5891 feet, or 3351 feet sub-sea. Oil saturation appearing in cores pulled from the Simpson topped at 5790 feet and Ellenberger at 5802 feet proved misleading.

This outpost for the deep zone occupies the highest structural position among the 6 Ordovician tests. Top of Simpson is 10 feet higher than the nearest producer, while the Ellenberger is about 148 feet higher, being partially due to abnormally short section of Simpson. Source of the water, which fills the hole at rate of 100 feet per hour, has not been determined. Water zone in the Ellenberger is generally more prolific. Local fault condition has been advanced as a possible cause of the absence of production in this test.

Sinclair Prairie Oil Company et al's J. B. Tubb 2, NW NW SW Section 3, about ½ mile northeast of the biggest deep producer, logged top of Simpson at 5842 feet, with an elevation of 2552 feet, being about 25 feet lower structurally, but cored to 6125 feet without encountering the Ellenberger limestone. Oil and gas showings have been recorded at intervals in this 283-foot section of Simpson. No test has been made to determine if it carries water. Gulf Oil Corporation's Waddell et al 5, nearest producer, logged 150-foot section of Simpson above Ellenberger at 5956-5971 feet, with an elevation of 2546 feet, and flowed 8179 barrels initial.

Sand Hills structure supposedly overlies a buried mountain range, thus accounting for the fact that the Ordovician section fails to conform with Permian producing zone. The latter is not subject to sharp variations, and is apparently free from local faulting.

General Crude Oil Company's T. P. Land Trust 1, northeastern Reeves County wildcat, was drilling in Delaware at 3590 feet, carrying 200 feet of fluid, including about 37 percent oil, from above. It was shot with nitro in Delaware sand zone at 3285-94 feet, then deepened when water appeared.

Stanolind Oil & Gas Company's M. Kyle 2, south offset to the second flowing producer from the Delaware in the Mason field, failed to yield sufficient oil with water to make a producer and has been plugged at 4124 feet. This company's Kyle 1, an east offset and due south of the discovery well, was abandoned in July under the same conditions after nitro shot in Delaware sand at 3870-3984 feet.

Jones County wells being completed

Abilene, Texas.—Two offsets to the discovery well of the Avoca lime area, northeastern Jones County, have cemented pipe to complete after penetrating the Canyon pay. Iron Mountain Oil Company and Humble Oil & Refining Company's Haterius 1, northeast offset, flowed wild for a few hours after drilling oil zone with machine at 3238-41 feet. Production has been mudded off, and 5-inch pipe cemented. Maracaibo Oil Exploration Company's Olander 1, east offset to the producer, drilled oil saturation at 3274-81 feet, with an elevation of 1557 feet, and cemented pipe at 3255 feet.

J. H. Hammer, plant superintendent and L. A. Dale, service man for Ruth Fuel Company of Bartlesville, Oklahoma, making use of slack summer months in the gas business to inspect and paint one of the firm's 4-inch regulator settings. With the coming of colder months, connection orders, greater loads and increased operations prohibit more than brief inspections of such equipment.

Magnolia building power plant in Fitts field

Tulsa.—Ground has been broken by Magnolia Petroleum Company for construction of a 5,250 horsepower electrical generating plant to serve the properties of the firm in Fitts field, Pontotoc County, Oklahoma. The new power station will be located on the north ten acres of the north Metropolitan Life Insurance lease, in Section 22, at the east end of the pool. Two units are to be installed immediately to satisfy power demands of the present time. As more wells go on pump, additional units are to be installed.

The station has been planned on the basis of an ultimate 5,250 horsepower load, this capacity to be reached through 7, 6-cylinder, convertible Diesels, of 750 horsepower each. These will be of the vertical type and will operate with natural gas as fuel. Immediate delivery of the two main units is expected. Construction work is to start this week on cooling towers in conjunction with the plant. An enclosed water system is to be used.

Magnolia Petroleum Company has chosen a site at the crest of a slight hill for the station, and plans call for the complete landscaping of grounds. The station will be the largest in the area, and is designed to be entirely modern in every detail. Many new developments will be incorporated into the construction of the station.

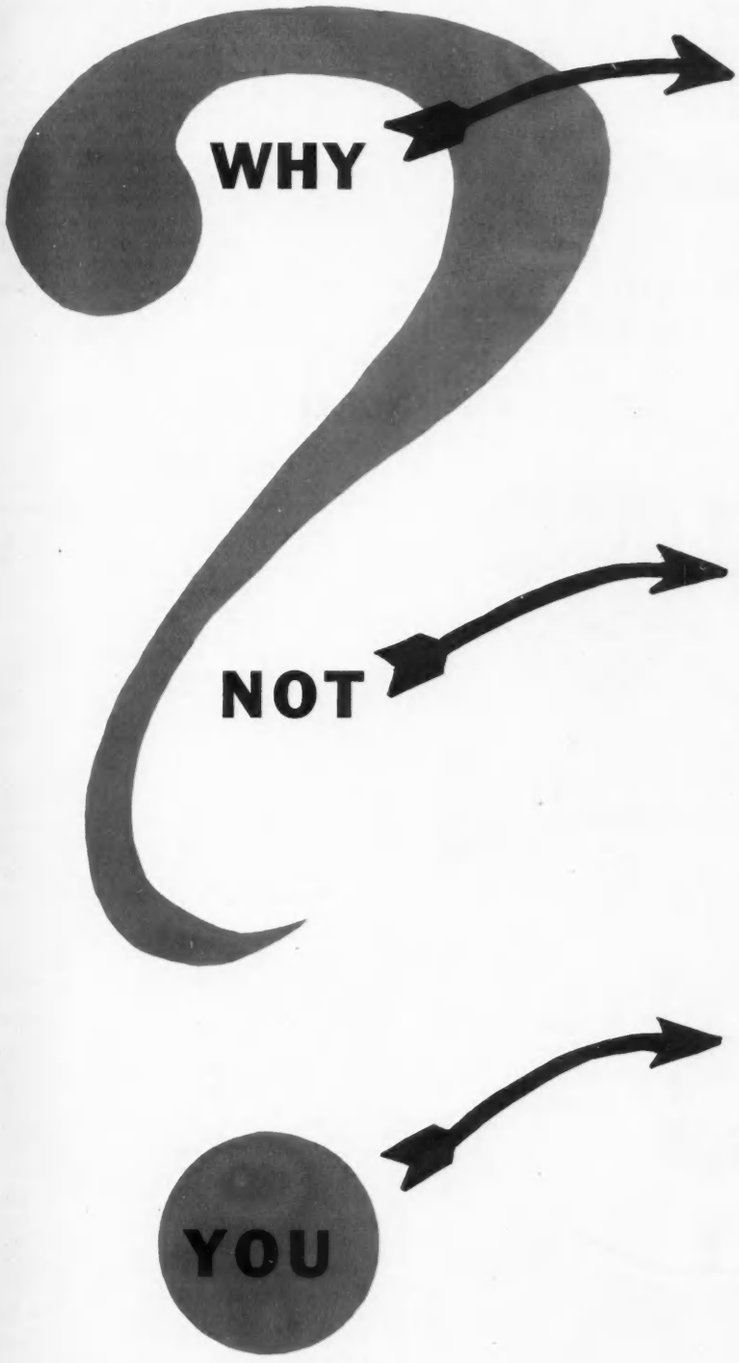
This station will be the third and largest generating plant for Fitts field. Carter Oil Company and E. H. Moore, Inc., each have plants in operation. These three firms are the major operators of the pool, E. H. Moore, Inc., owning about 26 percent of producing wells, Magnolia Petroleum Company approximately 19 percent, and Carter Oil Company about 10 percent. The remaining 45 percent of the production is divided among 24 other interests.

WEST TEXAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ANDREWS COUNTY (Means)—		
Humble, J. S. Means 27	698	4525
CRANE COUNTY (Jordan)—		
Snowden & McSweeney Co., University 1	803	3587
CRANE COUNTY (McCamey)—		
L. E. Edwards et al, Taylor-Sapp 2	830	2085
Enniscrane Prod. Corp., Hughes 3-B	679	2104
Bert Fields et al, A. Gibbs-Conoco 10	763	2267
A. Gibbs-Conoco 11	779	2284
ECTOR COUNTY (Goldsmith)—		
Atlantic, T. P. Land Trust 3-B	143	4289
Gen'l Crude Oil Co., H. E. Cummins 1-A	453	4235
Gulf, Goldsmith 37	1504	4217
Landreth Oil Corp., C. Scharbauer 7-G	1202	4215
Shell, T. P. Land Trust 4-A	536	4272
LOVING COUNTY (Mason)—		
Stanolind, M. Kyle 2	*	4124
HOWARD COUNTY		
Illinois Oil Co., J. P. Davis 8-B	871	2784
Owen M. Murray et al, J. P. Davis 7-A	523	2837
Shasta Oil Co., G. M. Dodge 11	855	2760
Sinclair Prairie, J. P. Davis 8-B	971	2825
PECOS COUNTY (Pecos Valley)—		
D. G. Gray & Fritz, Iowa Realty Co.-Redmond 1	*	1678
PECOS COUNTY (Torborg)—		
Cardinal Oil Co., Smith 13-A	17	398
PECOS COUNTY (Wildcat)—		
Glen J. Smith et al, W. F. Smith 1	*	2692
Trans-Pecos Oil Co., Popham 1-A	†	555
UPTON COUNTY (McElroy-Gulf)—		
Gulf, McElroy 155	243	3005
UPTON COUNTY (McCamey)—		
Basin Oil Properties, Baker-Conoco 2-A	1181	2289
J. K. Hughes Oil Co., D. Elder 2	850	2403
Gulf, E. S. Hughes 6-B	228	2259
G. H. Rogers 7	545	2246
Humble, R. P. Ricker 4-B	303	2685
B. C. Mann et al, Hughes 2	898	2274
WARD COUNTY—		
Atlantic & Standard Oil Co. (Tex), University 5-B	806	2770
Cities Service, McDonald 18	680	2440
Gulf, O'Brien 85	461	2774
Carl V. Schlaet et al, Gus Bergner 1	15	2239
Standard Oil Co. (Tex.), L. Adams 2	629	2650
I. B. McFarland 17, sec 37	412	2670
Tide Water Associated, Johnson 39	836	2648
Yeager & Armstrong, T. M. White-Sinco 1	†	2159
WINKLER COUNTY (Emperor)—		
Champlin Ref. Co., E. W. Cowden 2	300	2925
Bert Fields et al, E. W. Cowden-Pure 4-B	2139	3000
WINKLER COUNTY (Kermit)—		
Eastland Oil Co., R. Clapp-Pure 8	620	3170
Gulf, Daugherty 54	546	3146
Oscar Clapp 13	654	3110
Humble, N. R. Colby 22-A	452	3115
Magnolia, J. B. Walton 93	474	3265
J. B. Walton 94	476	3250
State-Walton 6	51	3309
Skelly Oil Co., N. R. Colby 8	1218	3110
WINKLER COUNTY (Keystone)—		
Amon G. Carter et al, J. B. Walton-Pure 12	210	3363
Bill Little et al, Walton-Pure 2	364	3394
YOAKUM COUNTY (Bennett)—		
Honolulu Oil Corp., Bennett 1	548	5279

*Failures; †Junked; ¶Million cu. ft. gas.



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Sunray buys Robinson area discovery leases

Abilene.—Sunray Oil Company, Tulsa, purchased the prolific discovery well of the Robinson area, Fisher County, and supporting block from Southern Oil Corporation of America for approximately $600,000. The deal was made effective August 18, and involves a substantial cash consideration, with the remainder due from production. The Joe Robinson 160-acre site and 2085-barrel natural producer in the 3517-foot lime, and a total of 1072 acres was acquired by Sunray Oil Company. A number of offsets will be required on the discovery lease.

Development of the Robinson area involves four close in operations and three nearby tests. Lewis Production Company's Morrow 1, east offset to production, was drilling at 3175 feet, and Tide Water Associated Oil Company's Smith 2, northeast offset, was drilling at 950 feet. The latter concern's Waddell 1, an east outpost, had progressed to 3150 feet, while Magnolia Petroleum Company's Smith 1, an intermediate test, was drilling at 2650 feet. Consolidated Oil Company and N. H. Martin's Florida 1, about 1¾ miles north of production, was drilling at 750 feet. Southern Oil Corporation of America's Ramby 1, about 1¾ miles west of its discovery, was shutdown for pipe at 1065 feet. The latter has also contracted to drill a wildcat near Roby on a 4000-acre block that centers upon the east portion of Thos. H. Crosby Survey, League 315.

James L. Anderson et al's E. Colwell 1, wildcat on northwest edge of Rotan townsite, was coring at 3688 feet, with an elevation of 1952 feet. It is about 160 feet below the sub sea depth of the producers in the Robinson area. L. C. Harrison et al have taken lease on a 7-section block, centering upon magnetometer high, and will drill in the northeast corner of H&TC Ry. Section 94, Block 1 about six miles east of the Robinson area.

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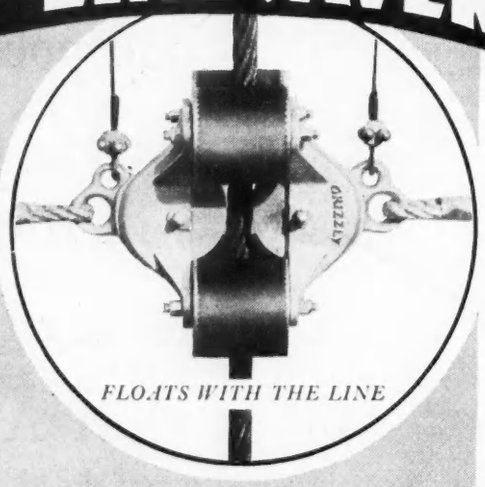

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NORTH TEXAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ARCHER COUNTY—		
L. T. Burns et al, J. S. Bridwell 6-A, sec 1866	*	902
O. P. Darsey et al, J. T. Longley 1, sec 1839	6	962
Fraser & Proctor, L. C. Garvey 1, blk 53	*	1540
Holbrook & Woods, J. S. Matlock 1, blk 25	15	644
W. T. Hutcheson et al, H. K. Dycus 1, blk 141	*	1426
COOKE COUNTY—		
Keil & Keil, B. Sears 3	*	1216
Geo. L. Pace et al, R. E. Aldridge 9	144	1137
A. D. Robinson et al, J. H. Otto 6-B	54	1303
Trumter Oil Co., Andress 8	12	768
GRAYSON COUNTY—		
Denver Prod & Ref. Co., Cannon 1.	39	2395
JACK COUNTY—		
Brazos River Gas Co., H. C. Moore 5	60	2950
Cliff Camp Drl. Co., O. Loving 1..	*	3244
W. R. Dearing et al, S. M. Jones 3.	90	3238
Hammon & Herbert, F. H. Rhodes 6	*	2355
J. G. Hammond et al, J. R. Williams 1	*	4780
Mar-Tex Oil Co., S. M. Jones 3....	306	3054
Moncrief & Showers, Inc., O. Loving 1	*	3400
Mullendore, Berry & Berry, D. C. Clayton 4	350	3151
Scott & Caprito, J. A. Raley 2....	*	3305
R. C. Veihl et al, W. R. T. Ezzell 3.	522	2952
York-Tex Pet. Co.-States Oil Corp., Clayton Bros. 4-A	111	3004
MONTAGUE COUNTY—		
Gulf, W. W. Jones 9-B	12	860
WICHITA COUNTY—		
G. W. Cooper et al, Waggoner Est. 27-C	10	687
Golding & Cochran, G. Jennings 1, sec 12	15	1597
King Oil Co., S. B. Burnett 3-B, sec 3	10	666
Panhandle Ref. Co., L. F. Ramming 16, sec 1	65	1743
Perkins & Snyder, J. Serrien 10, sec 6	32	1657
Geo. Proctor et al, Foster-Allen 15-A, sec 1	*	903
Ruyle Farm Oil Co., L. B. Ruyle 52	35	1635
Staley Oil Co., Munger Bros. 1, blk 25	400	3887
F. M. Tollet et al, J. L. Jackson 1..	*	1003
J. W. Williams et al, M. Dodson 1..	*	600
YOUNG COUNTY—		
F. J. Allbrittain et al, W. W. Gregg 12, blk 17	*	638
C. E. Logan 1, blk 24	*	611
Buchanan & Dickerson, Gilmore 1, blk 14	*	572
T. A. Dunkin et al, C. F. Newman 5	2	531
E. C. Lehman et al, J. R. Dyer 1...	*	650
L. A. Long et al, W. J. Mathis 1...	*	2355
Rathke Oil Co., Rochmill-R. J. Wadley 1	25	4074
Sinclair Prairie, L. P. Moren 11...	13	2566
West & Honea, G. Stewart 10, sec 1492	45	834
Henry Zweifel et al, R. D. Sewell 1.	¶37.1	4494

*Failures; †Junked; ¶Million cu. ft. gas.

EAST TEXAS

Anderson County test fails to show in Woodbine sand.

* * *

Work resumed on Travis Peak test in Mexia area.

Tyler, Texas.—Formation tester used on C. & G. Oil Company et al's F. A. Newsom 1, southern Anderson County wildcat, in Woodbine at 5981-94 feet, failed to show oil and gas. Relatively high structural position recorded by this test on the Pecan and Austin chalk markers when correlated with a single wildcat producer in the Percilla area, about 4¼ miles to the southeast, was offset by a thick section of shale above the Woodbine. It has an elevation of 486 feet.

Exploration of the lower Travis Peak and the Paleozoic in the Mexia field, Limestone County, will be resumed by Pure Oil Company's Kendrick 16 after recovering from extended fishing job at 6384 feet. Section of drill pipe has been sidetracked, and a string of 8⅝-inch pipe cemented at 6403 feet to protect the hole. No production was encountered in the lower Glen Rose lime series, or the upper Travis Peak, which was topped at 5656 feet.

Search for production in the lower Trinity series has taken an upturn in the East Texas district. Surface pipe was cemented the past week on Stanolind Oil & Gas Company and Ramsey Petroleum Corporation's Norris 1, located on the Thornton fault, Limestone County, and American Liberty Oil Company and LaRue Brothers' Johnson 1, located on the LaRue salt dome, Henderson County. On the east flank of the East Texas field, Gregg County, Humble Oil & Refining Company and Gulf Oil Corporation's E. D. Robertson 1, M. Mann Survey, has landed the first string of pipe.

Sun Oil Company's Davis 1, southwest outpost for the Sulphur Bluff field, Hopkins County, flowed 5 barrels of oil per hour initial from Paluxy at 4509-17 feet, with an elevation of 411 feet.

Allowable production of wells in the Talco field will be reduced from 75 barrels to 63 barrels daily effective September 1 to lower the total output to about 28,263 barrels daily.

TEXAS PANHANDLE

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CARSON COUNTY—		
Magnolia, Fee (No. 244) 28	115	3002
E. W. Means et al, E. Cooper 4-B	703	3070
Skelly, H. Schafer 85	861	3090
Texhoma Nat'l Gas Co., A. G. Smith 1-E	¶31.4	2675
GRAY COUNTY—		
Cities Service, W. E. Crow 7	709	3275
Gulf, E. G. Barrett 9	480	3293
Kewanee O&G Co., J. S. Morse 12-H	331	2680
King Oil Co., Brown-Shell 6	765	3276
Stanolind, A. J. Culler 7	366	3303
HUTCHINSON COUNTY—		
Drilling & Exploration Co., Inc., W. B. Haile 13	292	3060
McIlroy Oil Co.-Herrmann Bros., Haile 4	811	3064
Phillips Pet. Co., J. J. Perkins 12	271	2977
Rogan Oil Co., R. C. Kay 1	775	3233
Stanolind, W. B. Haile 6-B	481	3087
MOORE COUNTY—		
Shell-Sinclair Prairie, A. J. Donelson 1-C	¶81.1	3080
A. L. Miller 1	¶30.9	3259
WHEELER COUNTY—		
Du-Mar O&G Co., H. Finley 2	¶27.7	1970

*Failures; †Junked; ¶Million cu. ft. gas.

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HOUSTON, TEXAS

EAST TEXAS
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
JOINER AREA—		
G. B. R. Oil Corp., E. S. Thrash 8 (4.92-ac)	7200	3758
Haynes Oil Corp., C. Lee 19 (73.6-ac)	5000	3633
O. Henson et al, R. A. Motley 7 (43½-ac)	4500	3807
Hunt Oil Co., R. W. Fair 31-A (136.72-ac)	8600	3652
C. H. Lyons et al, W. P. Moore 7-A (40-ac)	300	3639
Magnolia, F. Wright 40 (78.1-ac)	7300	3712
D. B. Malernee & Bullock Oil Co., J. R. Alford 8 (26.35-ac)	1500	3720
McMurrey Corp., A. D. Blackwell 12 (84.88-ac)	5600	3671
M. G. R. Oil Co., A. Green 2 (4⅜-ac)	4200	3796
B. H. Rogers et al, H. C. Maxwell 9 26-ac)	7800	3750
Sun, E. Seale 3 (71.6-ac)	800	3733
Texas Canadian Oil Corp., S. S. Cook 7 (46⅔-ac)	3500	3766
KILGORE AREA—		
Abercrombie-Harrison Oil Co., M. A. Cantrell 19 (56.11-ac)	10,000	3659
American Liberty Oil Co., Sabine River 40, Tr. 5	9000	3521
Cities Service, E. L. Walker 14 (152.21-ac)	7200	3644
E. L. Walker 15 (152.21-ac)	4000	3653
E. L. Walker 16 (152.21-ac)	4500	3629
Bessie DeMayo et al, M. R. Terrell-Tidal 2 (10-ac)	4200	3696
Geo. Guthrie et al, G. Perry 3 (20-ac)	800	3713
Humble, J. A. Knowles 23 (100-ac)	4000	3608
Magnolia, Dick Wells 15 (100-ac)	240	3695
J. R. Sharp et al, E. Duncan 1-B (52/100-ac)	500	3531
Sun, A. G. Morton 26 (336.24-ac)	4000	3509
LONGVIEW AREA—		
Gen'l American Oil Co., McGeorge 2-B (10-ac)	8400	3512
A. J. Sanders 11-B-a	2600	3654
Gulf, M. O. Sheppard 50 (335-ac)	7800	3445
Humble, W. W. Holland 32 (201.63-ac)	9300	3647
W. W. Holland 33 (201.63-ac)	9200	3580
W. W. Lechner & Hubbard, J. B. Doby 6-A (17.65-ac)	10,200	3598
Joe Long Drl. Co.-Cushing Drl. Co., Owens 18-A (208-ac)	3600	3582
Magnolia, T. W. Tuttle 7 (48-ac)	7800	3618
Petroleum Corp. of Venz., Geo. Jones 10 (40.34-ac)	9600	3616
Rancho Oil Co., E. G. Richey 5 (12.76-ac)	8800	3606
Selby O&G Co.-Lewis Prod. Co., Ingram 11 (80-ac)	10,400	3550
Shell, S. C. Fishburn 18 (100-ac)	10,500	3531
Stanolind, J. B. Doby 13 (17.1-ac)	9000	3622
Minnie Jones 17 (83.23-ac)	8300	3560
The Texas Co., G. W. Clark 11 (60-ac)	8500	3600
D. Culpepper 8 (61.57-ac)	150	3721
E. M. Woods 14 (90-ac)	3000	3569
Tide Water Associated-Stanolind, Flewellen 51-B (374-ac)	3500	3736
CASS COUNTY (Rodessa)—		
United Gas P. S. Co., Viola Bivins 4, Jno. Collum sur	*	6025
Bauguss 1, Robt. Trammell sur (sec comp.)	528	6018
Bauguss 2, Trammell sur	510	6012
Mrs. Frank Bivians 4, Jas. Davenport sur	548	5986
Rambo Unit 8, Jas. Davenport sur	540	6009
MARION COUNTY (Rodessa)—		
Arkansas La. Gas Co. (Ark. Fuel Oil Co.), Emma Ford 1, A. D. S. Coy sur	576	6097
FRANKLIN COUNTY (Talco)—		
Stroube & Stroube, M. L. Norman-Prince 4 (135-ac)	564	4264
HOPKINS COUNTY (Sulphur Bluff)—		
F. D. Jones et al, Bassham-Gulf 3 (207-ac)	420	4535
TITUS COUNTY (Talco)—		
B. G. Byars & Pounds, C. W. Belcher 3-A (20-ac)	425	4310
G. M. W. Oil Co., Edwards 4 (20-ac)	200	4315
W. B. Hinton et al, L. Stevenson 1 (34.8-ac)	210	4321
Humble, M. Batson 4 (86½-ac)	453	4336
Magnolia, C. W. Belcher 5 (80-ac)	405	4315
R. E. Moore, Tr., M. B. Edwards 1-C (2¼-ac)	315	4302
Tide Water Associated, C. M. Carr 3 (74.37-ac)	201	4267
L. H. Wilson 7 (129.21-ac)	289	4286
Tysco Oil Co., Edwards 2 (20-ac)	†	3803
FREESTONE COUNTY—		
L. R. Stroud & C. A. Buzzard, W. N. Sneed 1	*	643
UPSHUR COUNTY—		
F. W. Maddox et al, S. T. Buie 1 (227-ac)	*	3751

*Failures; †Junked; ¶Million cu. ft. gas.

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Texas permits decline

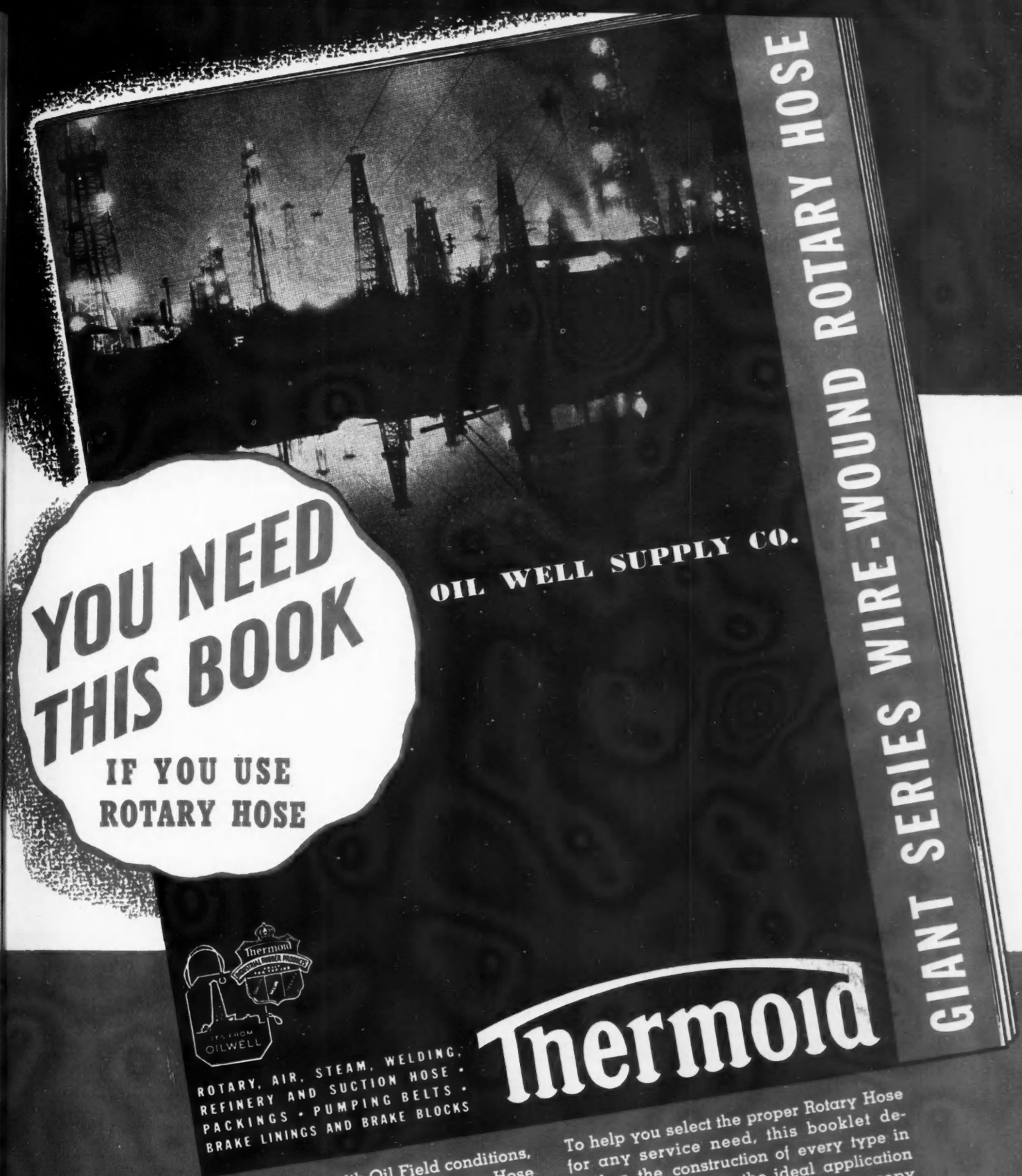
Austin.—The Texas Railroad Commission approved last week permits for drilling 214 new wells in Texas, 148 less than were allowed the week before.

In the East Texas field there were only nine new locations of which three were in Gregg County, five in Upshur County and one in Smith County. In the East Central Texas district there were 23 new permits, including 14 in Titus County.

West Texas listed 61 new locations of which 16 were in Ector County, 10 in Winkler County and 10 in Crane County. The Panhandle area reported 18 scattered locations.

North Texas reported 19 permits, while the West Central Texas district listed only 10. The new locations listed by both districts were scattered.

In the Southwest Texas area there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were 35 new locations, 13 being in Webb County. The Gulf Coast district reported 39 permits.

Shreveport.—Twenty-six drilling permits were authorized last week by the minerals division, Louisiana Conservation Commission, of which 15 were for North Louisiana, divided among the following parishes: Bossier 1; Caddo 4, including 1 in Rodessa; Claiborne 3, all in Lisbon; DeSoto 1; LaSalle 2; Lincoln 4, all in Lisbon. Those in South Louisiana were divided among the following parishes: Calcasieu 3; Cameron 1; Iberia 1; Plaquemines 1; St. Mary 1; Terrebonne 3; West Feliciana 1.

PROF. THOMAS FRICK, University of Tulsa engineering school, is carrying on research work in the Fitts pool.

GEORGE J. STALBAUM and William H. Pittman, both of Minatare, Nebraska; Theodore B. Ecker and Herman Humble, both of Lead, South Dakota, and E. C. Raymond, New Castle, Wyoming, have organized the Lemin Oil Company for development work in Weston County, Wyoming.

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SOUTH TEXAS

North Sweden extended northwest and southwest.

* * *

Two wildcats near Seven Sisters show.

San Diego.—The North Sweden field loomed bigger last week, and as a major producing area, when it was extended both to the southwest and to the northwest.

V. L. Blanchard et al's R. V. de Puig 1, one mile northwest of the field, in territory heretofore not proven. This well went into the Cockfield sand at 5395 feet, and a drill-stem test at 5411 feet recovered 220 feet of salt water and 500 feet of pipe line oil and registered 2500 pounds pressure through ⅜-inch choke in 18 minutes. Blanchard's test found a sandy section at 4760-74 feet, which on a drill stem test showed 2000 feet of mud. It has an elevation of 411 feet, derrick floor, topped Jackson at 4005 feet, and tested salt water. It is considered likely that the regular 4700-foot pay will extend close to the Puig well, and how much farther north Cockfield production extends is a matter of conjecture at this time. The well is waiting orders but it is likely casing will be set, as the strike is considered important despite the salt water.

Standard Oil Company of Kansas' Southland Life Insurance Company 1, NEc Block 12, and on a farm out from Hiawatha Oil & Gas Company, set casing after coring oil sand at 4767-75 feet. An electric formation log indicates excellent producing possibilities. The well is ¼ mile southwest of production in the 4750-foot sand and paves the way for further operations to the southwest.

The field's work continues very active, with a number of locations yet to be drilled. Work likely will center around drilling the area between the main field and the new extensions, namely the 1-mile to the east and the other to the southwest.

Seven Sisters area in northern Duval County again gained the spotlight of interest with two wildcats showing signs of production. Sun Oil Company has several hundred feet of oil in hole after bailing down. The test, in Section 222, and between the Labbe and Seven Sisters fields, found the Loma Novia sand at 2800-12½ feet. About 1½ miles southeast of the field, Mary L. Davidson 1 of Humble Oil & Refining Company was coring ahead below 2920 feet, after testing oil and gas in the Loma Novia sand. The test, located in Section 218, ran a test at 2903 feet, where only a little mud with 50 pounds pressure was recovered. At 2919 feet, 80 feet of oily mud and a little free oil was recovered.

South and east offsets to the discovery well of the Oilton pool, Webb County, developed some salt water with the oil, indicating definition to production in that direction. Gypsy Oil Company's Martin 4, south of the first producer, cored the upper sand showing some gas and the lower Mirando sand carrying considerable water. It is continuing tests. Rowan & Hope's Garcia 1, east of the discovery, developed 170 feet of oil and 10 feet of salt water in the same sand. The discovery well is pumping some salt water with the oil.

One location to the west of the first producer, Gypsy Oil Company's Martin 2, showed a potential of 253.25 barrels per day on pump, sand being logged at 1912-25 feet. The sand thickened to 18 feet on the next west location only 450 feet away, and the well apparently will be the best of the group. Now, it appears as though the Oilton and Killam fields, latter being 3 miles to the northeast, will ultimately be conected into one area.

Alta Mesa's second area is proved by completion

Mission.—Standard Oil Company of Texas' second producing area in the Alta Mesa district of Brooks County has been proved by completion of a 1,000,000-foot gasser in Metina Oil & Gas Company 1, Lease 2, which is located six miles north of the main field. The well, originally drilled to 6786 feet, found a number of oil and gas sands, but failed on completion tests, apparently due to mechanical difficulties. The well finally was plugged back and perforated at 1915-35 feet in the Catahoula, where it registered 250 pounds through ⅜-inch choke, and built up 790 pounds when shut in.

Rig has been skidded 150 feet to the west and a second well will test the oil sands. The discovery well is located 3601 feet south and 2239 feet east of the northwest corner of B. Garcia tract No. 11, and in the R. G. Salinas Survey.

The company was having a little trouble with Mestina 5, which opened a new sand after perforating at 4513-20 feet. The test flowed 280 barrels of 45 gravity oil through ¼- and ⅜-inch chokes under 500 pounds tubing and 900 pounds casing pressures. Flow valves were installed and the performance of the well was not as desired, following which tubing was pulled again and is being re-run. The well, in

the main field, provided the first high gravity production for the field.

The field's first failure was recorded when Mestina 8, 1800 feet west of production, was abandoned at 3003 feet. It tested mud at 2549-59 feet, drilled ahead and found the best sand at 3993-3003 feet, where completion was attempted. The well swabbed considerable oil, then was shut in 16 hours after which it swabbed seven barrels of oil and water, 85 percent of which was salt water.

Transwestern Oil Corporation's third well on the T. B. Slick block in central Starr County, is fighting a heavy gas pressure at 5374 feet, likely near the bottom of the Jackson. Pressure builds up to 2500 pounds on the casing head when blowout preventer is shut in. The other wells found a similar condition at this level and were abandoned.

After going to salt water from sand at 5462-79 feet, K. E. Merren's Starr County Cattle Company 1-A, was plugged back and perforated at 5417-27 feet, where it is cleaning, showing oil, gas and wash water. The test, located in the Barbacoas field of Starr County, is attempting to establish oil production in the Cockfield.

Live Oak wildcat failure in Pettus

Beeville.—First of a series of wildcats contracted for the J. W. Nichols Ranch, northwestern Live Oak County, resulted in a Pettus sand failure. The well, C. E. Jacobs et al's J. W. Nichols 1, S. Ryan Survey, topped the Pettus horizon at 1592 feet, drilled in a few feet and abandoned. Unit Petroleum Company's Nichols 1, same survey, is drilling ahead below surface plugs.

Goliad Oil Company has abandoned S. E. Cole 1-A, east offset to the discovery well of the LaBahia field, Goliad County. The test is at 5687 feet, where it showed for a distillate well. The test likely will be placed on production later.

Dirks Brothers provided a slight west extension to the South Burnell field, Karnes County, through the completion of a second well on the Ruhmann tract.

Gulf Coast sector has a quiet week

Corpus Christi.—Gulf Coastal sector of South Texas provided the first slow week in months from the new discovery standpoint. Other than several very minor field extensions, nothing of interest happened.

Southern Minerals Corporation's Bessie Elder 5, slightly more than ¼ mile east of 6700-foot production in the Saxet field, Nueces County, ran a drill stem test at 6727-41 feet, in which 15 stands of oil and two stands of salt water were recovered in 15 minutes, pressure being 35 pounds. An electric formation tester was run and it is likely that casing will be set rather than drilling ahead to the 6900-foot level. This test found the sand at 6731-41 feet.

Seaboard Oil Corporation of Delaware, which has uncovered four sands in the new Luby field, Nueces County, is coring ahead below 7245 feet, and likely will be carried to 7500 feet or deeper if production is not encountered in new sands. The well, K. L. Shaffer

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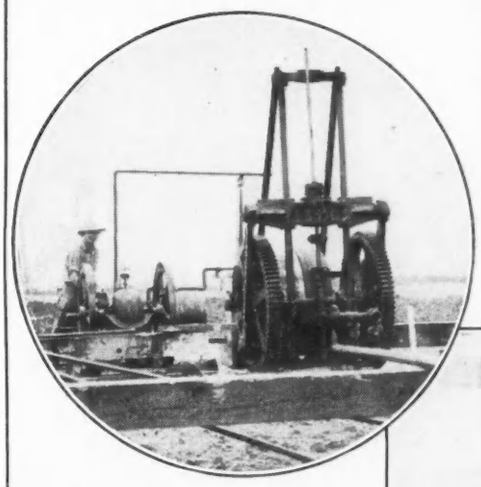
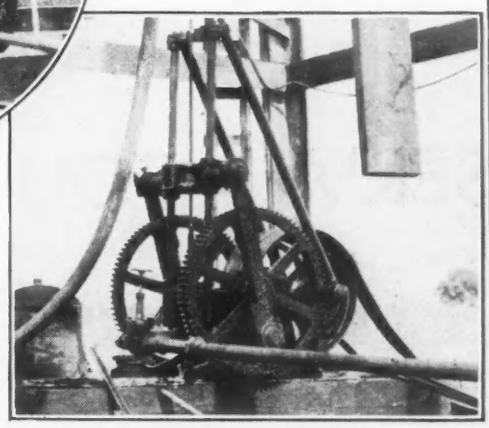


Alert operators in Austin Chalk and Edwards Limestone fields, San Antonio, are turning constantly to the SAMSCO DUPLEX PUMP JACK for proven efficiency and economy of operation and because of the lifting power they secure. Pictured are two of these Jacks in operation.

TOP—The Lincoln Petroleum Discovery Well of Edwards Lime production at Branyon. Here the Samsco Duplex Pump Jack is proving its efficiency and economy.

RIGHT—The Lockhart State Bank Number One. The Samsco Duplex Pump Jack is used on this one-mile extension well to Branyon Field.



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1, is an east offset to the discovery. Stanolind Oil & Gas Company's G. H. McCann 1, also in the field, has been completed, but not gauged. Production is coming from broken sand at 5033-55 feet.

Just south of production in the London field, Nueces County, Wellington Oil Company and Seaboard Oil Corporation's Lehman 1, cored oil sand at 4943½-51 feet and ran drill stem test 4942-51 feet.

Pearsall Extension

Amerada Petroleum Corporation may finally meet with success in its efforts to complete D. D. Harrison 1 as an Austin chalk producer to extend the Pearsal field 2½ miles to the southwest. This Frio County wildcat flowed 74 barrels in 1¼ hours through open tubing before being shut in. The pressures built up to only 300 pounds on casing and 20 pounds on tubing after 22¾ hours, and the well may be placed on pump. It had been drilled to 6410 feet, but completion is being effected in plugged back hole at 5706 feet.

The above company is drilling below 10,410 feet in Halff and Oppenheimer 8, Pearsall field, South Texas deepest test and third on the area to progress below 10,000 feet.

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SOUTH TEXAS
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
SAN ANTONIO DISTRICT		
BEXAR COUNTY—		
Eckert & Son, Felix Stapper 1, 3000 ft., wl, 880 ft. n'ly sl of 359-acre tr, N. Motaya survey No. 21....	*	1007
CALDWELL COUNTY—		
Fred J. Adams, W. M. Ellison 6-B, D. Cooper & R. B. Jarmon sur., (Branyon)	175	2290
Mrs. Luna E. Shinn 1, 705 ft. sl, & on extension of "L" corner of Shinn tr.	*	2842
Fred J. Adams & C. F. Richards, Flowers & Leyendecker 1, D. Cooper & J. A. Neill sur., (Branyon)	60	2176
Flowers & Leyendecker 2, D. Cooper & J. A. Neill sur., (Branyon)....	100	2126
Artz & Horner, Hal Browne et al 4, J. R. Miller sur., (Branyon).....	390	2201
Easton & Manning, W. T. Cude 2, Wm. Spiller sur., (Buchanan).....	*	400
Ed-Will Oil Co., B. F. McConnell 3, Wm. Spillers sur., (Buchanan).....	85	2265
Hantho-Nelson, Inc., Hal Browne 1, J. R. Miller sur., (Branyon).....	540	2075
Judge Brothers, R. Medlock 1, J. A. Neill sur., (Branyon).....	24	2246
Koenig Oil Co., W. J. Tiller 12, John Henry sur., (Luling)	151	2102
Lincoln Pet. Co., M. W. Calliham 7, Dillard Cooper sur., (Branyon)....	157	2123
M. W. Calliham 8, Dillard Cooper sur., (Branyon)	150	2113
Martell Pet. Co., W. S. Clark 2, J. R. Miller sur., (Branyon).....	120	2141
J. M. Young 1, J. R. Miller sur., (Branyon)	40	2343
Memphis Nat'l Gas Co., J. M. Young 5, J. R. Miller sur., (Branyon)..	*	2275
Millican & Norman, Willie Lee Talbert 4, John Henry sur., (Luling)	45	2103
Stewart, Carter, Ramos, J. J. Brown 1, C. M. Cannon sur., (Buchanan)	20	2297
W. T. & D. Prod. Co., W. A. Magee 2-A, John A. Neill sur., (Branyon)	*	2399
GUADALUPE COUNTY—		
Jas. H. Eddy, D. F. Smith est. 1, 913 ft. wl, 1400 ft. sl, 435-ac tr, W. H. Hunter sur.	*	2624
Felmont Oil Corp., W. O. K. Anderson 1, 3825 ft el, 6200 ft. nl of Green DeWitt sur. No. 11, A-16..	*	2452
Hantho-Nelson, Inc., Edwin Forsage 1, James Hodges sur., (Darst Creek)	*	20
HAYS COUNTY—		
Mallory-Holcomb & Nance, J. A. Hudenrich 1, 330 ft nel, 330 ft. nwl of 496-ac tr, W. Hemphill sur.	*	815
N. G. Williams, Frances Jennings 1, 110 ft. sl, 180 ft. el of lse in 2235-ac tr, Venmonds sur.....	*	815
WILSON COUNTY—		
R. C. Stanley, E. M. Hierholzer 2, 450 ft. nel & nwl, blk 3, 736-ac tr, R. Salina sur.....	*	1031¼
CORPUS CHRISTI DISTRICT		
ARANSAS COUNTY—		
Atlantic, Guaranty Bond & Mortgage Co. 1B, lot 12, blk 13, McCampbell Ranch subd.	325	7121
Peach Tree Oil Co., L. L. Porterfield 1, lots 15 and 16, blk 10, McCampbell Ranch subd .....¶5 &	50	7125
BROOKS COUNTY—		
Standard Oil Co. of Texas, Mestina O&G Co. 1 (Lease 2), 3601 ft. s and 2239 ft. e of nw cor B. Garcia tract No. 11, R. G. Salinas sur., La Mestina y Gonzalena grant (perf 1915-35)	¶1	6786
Standard Oil Co. of Texas, Mestina O&G Co. 8, (Lease 1), 6200 ft. w, 600 ft. n of sw cor of Garcia tract No. 2, and in tract 5, La Mestina and Gonzalena grant.....	*	3003
CALHOUN COUNTY—		
Humble & Plymouth, E. H. Welder 12, J. M. Rios sur., (Heyser)....	625	5456
GOLIAD COUNTY—		
Goliad Oil Co., S. E. Cole 1-A, 866 ft. wl, 527 ft. sl of lot 33, Range 4, Goliad Town tr.....	*	5687
HIDALGO COUNTY—		
Davenport-Swallow, C. H. Swallow 1, Blk 215, La Blanca "B" subd., Llano Grande gr.....	*	7565
Dayle L. Smith Oil Co., Fairbanks & Young 1, 2500 ft. n of highway No. 4, 3 mi e Samfordyce field, 195 ft. sl and el of 576-ac tr, blk 14, porcion 46.....	*	2310

*Failures; †Junked; ¶Million cu. ft. gas.

Company, Well and Location	Init. Prod. Bbls.	Depth
JACKSON COUNTY—		
George J. Greer et al, J. R. Davis 1, 1000 ft. e of e Bank of Red Fish Lake and center of nl and sl of Arkansas 1000-ac lse D. H. Hoffman sur. A-33	*	6991
JIM WELLS COUNTY—		
Roy Gaines et al, W. D. Wade 1, 100 ft. sl, 100 ft. wl of 100-ac lse, Casa Blanca sur., 1 mi n Sandia field	*	5152
KLEBERG COUNTY—		
Humble O&R Co., R. J. Kleberg 10, K.T.&I. subd., Kingsville	*	4010
NUECES COUNTY—		
R. B. Bryant, Fred Frank 8, C.E. I.P.&M. sur. No. 500 (Saxet)	150	6951
Crown Central Pet. Corp., Sally Page 5, Page Lands sur. (Saxet)	320	4398
Donico Prod. Co., V. M. Donigan 1, Kenney sur. (Saxet)	850	4900
Tom Graham, Ida Harmon 5, sur. 416 (Saxet)	110	6939
Houston Oil, Clara D. Sevier 1, Quadrilla Irr sur. (Clara Driscoll)	*	3903
Humble & Barnsdall, Josie Miller 6-B, blk 48 Flour Bluff and Encinal Grdn tr (Flour Bluff)	500	6662
Phillips Petr. Corp., K. Hutchins 6, Sheppard Farm Lots (Saxet)	625	7006
Republic Natural Gas Co., John Dunn 20, Sheppard Farm Lots (Saxet)	275	6977
Richardson Pet. Co., Cain Sechrist 21, J. C. Russell Farm Lots (Saxet)	475	4864
J. B. Sedwick 10, John Dunn sur. 312 (Saxet)	350	4889
Southern Minerals Corp., Lucy J. Rivers 1, 990 ft. el, 330 ft. nl of sec. 301, Bishop subd.	*	6015
Stanolind, G. H. McCann 1, Canutillo colony Ditch sur. (Luby)	350	5055
Sam E. Wilson, Jr., Moody 1, Villareal gr (Saxet Heights)	150	4084
REFUGIO COUNTY—		
Hewitt & Dougherty, M. F. Lambert 53, J. M. Swisher sur. No. 8 (Tomoconnor)	1075	5917
M. F. Lambert 54, J. M. Swisher sur. No. 6 (Tomoconnor)	1050	5917
Nordan & Morris, Tom O'Connor 12, James Hewitson sur.	1100	5915
Quintana Petr. Co., Mrs. A. Reilly 4, M. J. Ximinies sur. (Tomoconnor)	1500	5937
United Prod. Corp., M. F. Lambert 62, J. M. Swisher sur. (Greta)	1150	5915
SAN PATRICIO COUNTY—		
Humble O&R Co., J. W. Mayo 27, J. H. W. Ottman sur. (Taft)	680	3981
Phillips Petr. Co., Henry Schmidt 2, Geo. H. Pauls subd. (Midway)	250	5389
Plymouth Oil Co., E. H. Welder 80-C, Welder Ranch subd. (Plymouth)	500	5489
Sun Oil Co., A. A. Roundtree 3 Taft farm lands (Plymouth)	30	5657
Wellington Oil Co., James F. Welder 1B, 330 ft. nl 990 ft. wl, Cubage & Miller subd.	*	7090
VICTORIA COUNTY—		
Magnolia, O. M. Lander 1, J. E. Glaban sur. (Heyser)	450	5749
Haynes B. Owenby, T. P. Traylor 4, sec. 7 (Placedo)	200	4769
LAREDO DISTRICT		
DUVAL COUNTY—		
Cox & Hamon, O. W. Greene, BS&F sur. No. 118 (Hoffman)	55	2771
O. W. Green 19, BS&F sur. No. 118 (Hoffman)	45	2741
Yoakum-Green 8, BS&F sur. No. 118 (Hoffman)	60	2744
Government Wells Oil Co., H. A. Lundell 5, sec. 140 (Lundell)	150	1524
Humble, J. F. Welder, 23-C, sec. 554 (Loma Novia)	125	2690
Magnolia, Servando Benavides 31, O'Hern & Seacord sur., El Mesquite Gr. (Cole-O'Hern)	75	2880
DCRC, sec. 100 (Piedra Lumbre)	450	2014
Russ Pet. Corp. et al, A. Farias 4, Sweden subd. (N. Sweden)	500	4820
Texas Canadian Oil Corp., Mary J. Luby 1, Garza Irrigation sur., 330 ft. nl, 660 ft. wl of 83.6-ac tr, subd. 10	*	5102
McMULLEN COUNTY—		
Howell Oil Co., Kate Martin 1, 5500 ft. el 5000-ac tr, 4000 ft. nw Nueces River, D eastepr sur. No. 213	*	3510
Edwin M. Jones, Harry Ezzell 8, H. Russell sur. (Ezzell)	168	1570
Edwin M. Jones, Harry Ezzell 10, H. Russell sur (Ezzell)	275	1547
Edwin M. Jones, Harry Ezzell 11, H. Russell sur. (Ezzell)	305	1535
Loma Oil Co., L. Jacob Corp. 11-B GH&H Ry sur. (N. Jacob)	*	1070
V. G. Schimmell et al, E. R. Hagist 2, 1237 ft. w'ly wl, 330 ft. s'ly sl, R. W. Mills sur.	*	2816
STARR COUNTY—		
Gilcrease Oil Co., C. M. DeCastillo 3, 2000 ft n and wl 170-ac tr, sh 7-B por. 77	*	822
Sun Oil Co., M. Guerra & Sons 13-A, Cuevitas gr. (Cuevitas)	525	2278
WEBB COUNTY—		
Gypsy Oil Co., Maria G. Martin 2, 220 ft. nl, 670 ft. el, sur. 458	253	1927
ZAPATA COUNTY—		
B. W. Roscoe, C. Bustamante 32, sh 33 Fansler partition (Escobas)	27	1204
C. Bustamante 32, sh 33 Fansler partition, Comitas gr (Escobas)	30	1204

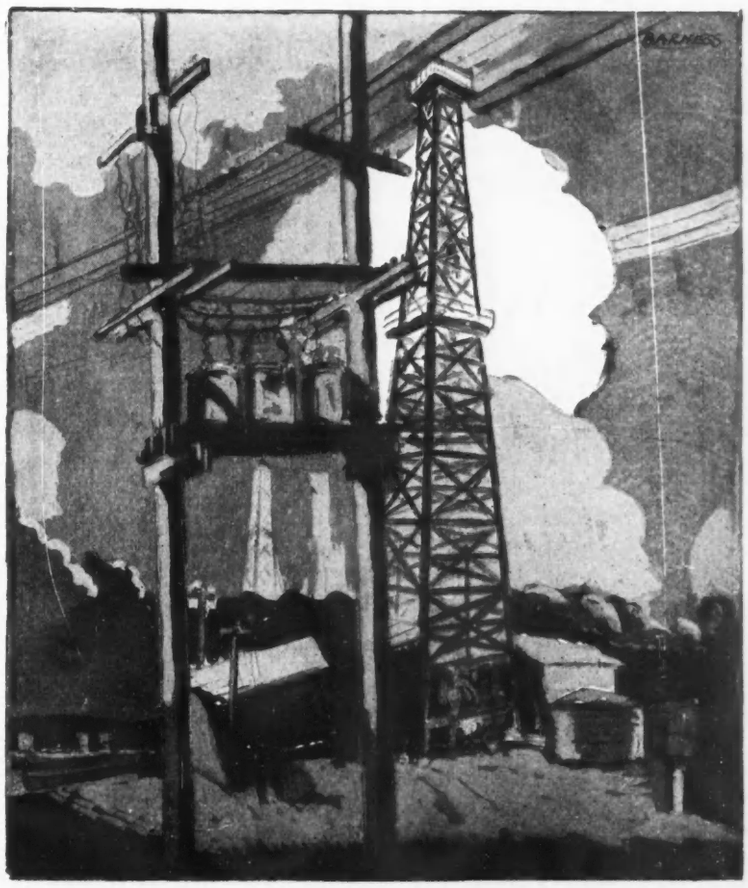
*Failures; †Junked; ¶Million cu. ft. gas.

To deepen Bastrop wildcat before testing showings

San Antonio. — Plugs have been drilled and preparations are being made to drill more Austin chalk, then test R. Olsen Oil Company's Mattie Murchison 1, Bastrop County wildcat. The test found saturation in this formation at 1828-47 feet, and 7-inch casing was set at 1828 feet. It is expected at least 150 feet will be taken in and the hole acidized.

It is located in a 505-acre tract in the Addison Litton Survey, about four miles southeast of Cedar Creek.

Two miles to the northeast on the same trend of faulting, Hantho-Nelson, Inc.'s K. M. Litton, which on first tests



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looked like a big well, has encountered considerable difficulty and is again attempting to complete. It topped Austin chalk at 1972 feet, at which point casing was set, and the hole drilled ahead to 2112 feet. After acidizing with 4000 gallons, it was swabbed, recovering considerable oil. Swab was lost in the hole below the casing seat, causing the hole to bridge when gas pressure raised the fish. Hole has been cleared of the swab obstruction and new water line laid to location. It now is cleaning out for production test. Should it fail to make a flowing producer, it will either pump or drill ahead to test the Edwards limestone. At any event, it is an important well and indicates that this new producing area is going to extend several miles along a well defined fault.

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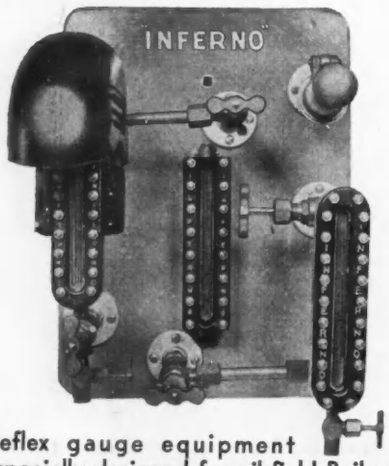

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TEXAS GULF COAST

35 completions bring about important extensions.

* * *

Hastings continues most active field in district.

* * *

West Columbia looms as new deep crude reserve area.

Houston. — Thirty-five completions recorded in this district during the week resulted in several important field extensions and 29 oil wells. There were no wildcat discoveries, though a number of exploratory tests experienced interesting developments.

Hastings continues to lead the Texas sector of the coast in activity, recording northwest and northeast extensions during the week along with 8 completions, 7 of which were productive. Both extensions were effected by Humble Oil & Refining Company wells: J. E. Alexander 2, a northwest flank extension, produced 610 barrels from 6090 feet; South Texas Grain Company 4 flowed 557 barrels per day through ¼-inch choke when completed at 610 feet and extended the field northeast.

Extension Indicated

La Quinta Oil Company's Wing 7 at Segno field, Polk County, probably will extend the field 660 feet southwest from its Wing 6, an outpost completion of the week. Wing 7 is setting pipe for a production test after having cored oil sand from 5238 to 5246 feet. Wing 6 gauged 176 barrels of pipe line oil per day through ¼-inch choke when completed at 5194 feet. Tubing pressure was 1650 pounds, casing pressure 1700 pounds.

Silsbee Outpost Produces

Republic Production Company extended Silsbee field in Hardin County 1000 feet east during the week and offers, through developments in a currently drilling test, another possible extension of 1000 feet east for next week. Brooks 19 was completed in Cockfield sand at 6905 feet for 314 barrels of clean oil, with tubing and casing pressures of 1900 and 2100 pounds, respectively, extending the field east. The possible eastern extension for next week is Brooks 20, which is running screen and liner to test Cockfield sand at 6915 feet.

Friendswood Is Hot Spot

The recently discovered Friendswood field in Harris County, given a market factor rating by some as a result of V. H. Borsodi's 1½-mile southeast extension of the area a couple of weeks ago, continues one of the hot spots of the Texas Coast, with leasing activity sustained at high pitch in the neighborhood. Borsodi has staked two new locations on the Lena Berlowitz property in the Sherman Place subdivision of the Thomas Choate Survey, both being south of his producer, now rated at 529 barrels per day on potential test August 26. Meanwhile his Ross 2 was running casing to 1188 feet August 27. Humble Oil & Refining Company's Beamer 1, located 933 feet northeast of the discovery well of Friendswood, was drilling slightly below 5757 feet as the week closed, looking for the sand topped at 5811 feet in the discovery test. Its C. A. Gray 1, northwest offset to the discovery test, is a location.

West Columbia Revival

Judging from late accomplishments of The Texas Company and Sterling Oil & Refining Company there, the old West Columbia field of Brazoria County may be in for considerable activity for the next few months. The field was one of the more important shallow reserves in the early Gulf Coast days. Two deep completions there this week by the above concerns, operating jointly, indicate the field may yet be classed among the important deep reserves of the district. Abrams 16 was rated at 600 barrels per day initially when completed during the week at 5604 feet after running 115 feet of screen. Tubing pressure was 790 pounds; casing pressure, 545 pounds. Phillips 2 was a better completion, being rated at 80 barrels per hour initially through ½-inch choke. The latter was drilled to 5636 feet and set 60 feet of screen to tap the Frio sand. Pressures were 445 pounds on the tubing and 400 pounds on the casing. These profitable completions presage additional drilling.

Among the more important wildcats in the Texas Gulf Coast, Ohio Oil Company's H. Kempner 1, Chocolate Bayou area of Brazoria County, appears disappointing, having shut down at 7511 feet after having been reported to have logged a salt water sand at 7355 feet. The hole is being surveyed to 7500 feet. The wildcat is a Frio project.

Cedar Bayou prospect in Chambers County will get a 7500-foot test. Ingot & Merit Oil Company's Wright et al 1

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will be drilled on a location two miles west of Cotton Lake and four miles southwest of Barbers Hill in the C. Smith Survey, Abstract 22. It will afford a test of a 4000-acre block.

Plug Back Bammel

After drilling to 10,574 feet, Superior Oil Company will plug back to test Cockfield sands at about 6280 feet in J. A. Butler 1, Bammel prospect wildcat in Harris County. Reason for the plug back job was a drill stem test at 9780-9815 feet which showed only mud and water. Several exploratory efforts have been made on and around Bammel prospect, but none has developed commercial production.

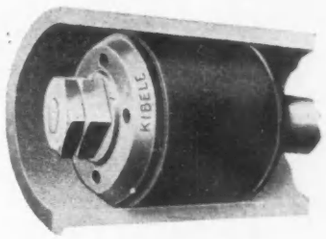
Sheppards Mott in Matagorda County has been the scene of considerable drilling, with heaving shale proving the nemesis in several instances. Continental Oil Company's Hawkins 2, D. McCarthy Survey, is mixing mud this week after having logged a sand showing oil last week at 7216 feet. Previously this wildcat logged a sand showing oil at 6619 feet after 11¾-inch casing had been set at 5150 feet. The test will be closely watched for a fortnight.

TEXAS GULF COAST Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
AMELIA—		
Humble, T. H. Crook 6	658	6777
Langham 4	*	6810
J. H. Phelan 8	*	6810
Glenn H. McCarthy, Longe 4-A	540	5891
BARBERS HILL—		
Superior Oil & Gas Co., Barber B-3 (owdd)	378	3884
BIG HILL—		
Stanolind, S. W. Pipkin B-2	*	6414
CLEVELAND—		
Gulf, Kirby 19	600	5880
DICKINSON—		
Atlantic Ref., Roberts 3	550	8072
FIVE CORNERS—		
The Texas Co., Pierce Est. B-8	147	5561
FRIENDSWOOD—		
V. H. Borsodi, J. Ross 1	672	6103
GOOSE CREEK—		
Sun, Smith 1	35	1064
HARDIN—		
L. W. Wicks, Lynott & Buffum 1	*	7703
HASTINGS—		
Humble, J. E. Alexander 2	610	6090
So. Tex. Grain Co. 4	557	6110
Stanolind, A. W. Condon 3	457	5900
Brown B-6	602	5707
Long 4	514	5730
A. C. McKibben 4	625	5863
Shaw 8	586	6048
Sneed 9	610	6080
Sneed 10	*	6120
HULL—		
Gulf, Baldwin 24	267	5579
Baldwin 22	459	4080
Republic-Houston Oil, Dolbear 36	*	2954
HUMBLE—		
Glass Oil Co., Herman 19	42	1035
NOME—		
Sun, H. Long 6	306	6043
Paggi 10	251	6045
PALACIOS—		
Atlantic Ref., Palacios State Bank 1	85	7880
SEGNO—		
J. K. Dorrance, Wing 3	718	5278
La Quinta Oil Co., W. G. Wing 6	176	5194
SILSBEE—		
Republic Prod. Co., Brooks 19	314	6905
TURTLE BAY—		
Stanolind, A. D. Middleton 3	260	6600
TOMBALL—		
Humble, J. D. French 1	536	....
WEST COLUMBIA—		
The Texas Co., W. H. Abrams 16	600	5604
Sterling O&R-Texaco, Phillips 2	1920	5636

*Failures; †Junked; ¶Million cu. ft. gas.

For Small Pumps



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SOUTH LOUISIANA

Stanolind discovers gas field on China prospect.

* * *

Deepest producing well starts making salt water.

Lake Charles.—China prospect in Jefferson Davis Parish was changed into a gas field this week when Stanolind Oil & Gas Company's Calcasieu National Bank B-2 built up 250 pounds pressure in 1 minute and 40 seconds when sands at 8955-65 feet were perforated. On the same drill-stem test the wildcat made 125 feet of mud and distillate in three minutes, but would not flow. This well originally was drilled to 9851 feet.

China is a geophysical discovery, the area having been worked by the above company and others in 1934 and 1935 as result of a trend play east and west generated by discovery of Tepetate field in Acadia Parish. While the current test is in Section 28-7s-3w, the best prospect for production first was thought to be in Section 27.

Record String of Seven-Inch

Continental Oil Company, drilling a wildcat in the Abbeville district of Vermilion Parish, established a new world's record for 7⅝-inch casing setting by cementing the string at 11,342 feet in J. A. Brookshire 1. Fifteen hundred sacks of cement were used.

Brookshire 1 is in good condition to be drilled considerably deeper. The hole was straight at 11,107 feet. No commercially significant showings of oil were logged between that depth and the seat of the 7⅝-inch casing.

More drilling will be needed to remove South Lake Charles, Calcasieu Parish, from the prospect list and class it among proven fields. Stanolind Oil & Gas Company, attempting to develop production in SW 10-11s-9w through drilling Prairie Land & Canal Company 1, quit the project in shale at 9120 feet this week. For the records, Amphistegina was marked at 5009 feet, restricted Discorbis at 8280, Heterostegina at 8594, and Marginulina at 8997 feet.

Union Sulphur Company is preparing to make a drill-stem test on the South Roanoke wildcat, T.R.S. Farms 1, after having cored a sand showing oil from 9139-46 feet and perforating with 28 holes from 9136-40 feet. This Jefferson Davis Parish test is in Section 23-10s-4w.

Lost Returns

It may be that Gulf Oil Corporation's State Quarantine QQ 3, Plaquemines Parish wildcat drilling at 1550 feet as the week closed, will have something of interest to report next week. At 953 feet the test was losing returns, a situation which could indicate proximity of cap rock.

Considerable curiosity is expressed as to what The Texas Company will do when it drills the plug from 10-inch casing set at 10,515 feet in State Bateman Bay 1, wildcat on the Morgan City prospect of St. Mary Parish. Plans of a drill-stem test have not been announced, but one is expected. At 10,541 feet, bottom of the hole, the wildcat was reported in shale.

The world's deepest producing well, Humble Oil & Refining Company's Ellender 1 in Lirette field, Terrebonne Parish, is making salt water and probably will have to be worked over. While total depth of the wildcat is 12,168 feet, it was producing from perforations at 11,610-15 feet.

The Texas Company's State Bay Norman 1, Lafitte field in Jefferson Parish, drilling in hard sandy shale at 10,434 feet, is reported as having a 13,000-foot objective. The hole is protected to 9674 feet with 9⅝-inch casing.

Two abandonments last week by Humble Oil & Refining Company on Potash dome, Plaquemines Parish, at 1124 and 1280 feet, respectively, apparently have not dampened the company's opinion of the prospect. Of two currently drilling tests there, Orleans Levee Board 4 was in lime and shale at 750 feet after encountering cap rock at 695 feet, and Orleans Levee Board 5 logged a foot of oil sand at 675 feet and drilled ahead to 745 feet. In addition, the organization made locations during the week for five additional tests in Sections 9, 10, and 12 of Township 18s, Range 15e.

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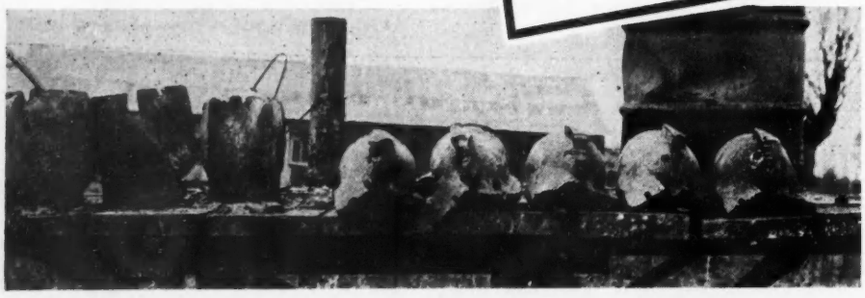

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SOUTH LOUISIANA Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
JENNINGS—		
Superior, Leckelt 6	405	7225
A. C. Glassel, Trushell 3	550	6962
BAYOU BLUE—		
Humble, Wilbert 3	*	2960
CHARENTON—		
Pan American, Landry 1	*	8822
CALCASIEU PARISH—		
Stanolind, Prairie Ln. & Canal Co. 1, So. Lake Charles prospect	*	9120

*Failures; †Junked; ¶Million cu. ft. gas.

Lodi area of Rodessa extended half mile.

* * *

Cotton Valley deep outpost is not showing.

Shreveport.—The Lodi offshoot of the Rodessa field in Marion County, Texas, 8½ miles southwest of Cass County production which now has ten producers, was extended one-half mile east toward the main part of the field last week when Arkansas - Louisiana Gas Company's Emma Ford 1, A. de los Santos Coy Survey, was completed at 6097 feet flowing 24 barrels of oil per hour through ½-inch tubing choke.

However, in the same area and north of production the same company's Fant 1, L. P. Cadenhead Survey, after swabbing oil and salt water, at plugged back depth of 6183 feet, was plugged back for perforating casing for another test. The well allowed to stand overnight after being swabbed to bottom rose 2100 feet in fluid only 400 feet being oil.

Gulf Oil Corporation's Henderson 1, R. Bennington Survey, northwest offset to Holcomb and Thomasson's Lizzie Henderson 1, same survey, the only producer in the Jefferson area, Marion County, showed 10 feet of gas-distillate saturation in a core in the Henderson sand from 6014 to 6034 feet last week and was coring ahead for the Gloyd.

R. W. Norton's Payne 1, SE SE 27-23n-16w, deepest test in this territory that went into Permian salt for 16 feet before plugging back from total depth of 11,486 feet, was completed last week at 5980 feet in the Hill gas horizon gauging 19,000,000 feet of gas through open tubing with casing and tubing pressures equalized at 1600 pounds.

The northwest limits of the Cass County side of Rodessa were further defined last week when United Production Corporation abandoned Viola Bivins 1, John Collum Survey, as a dry hole at 6025 feet.

Cotton Valley Outpost

Standard Oil Company of Louisiana last week continued swabbing without result last week in E. L. Stewart 1, SE SE 32-21n-10w, 1½-mile southwest outpost of the Cotton Valley lower Marine field, but without any showings of oil or gas. Depth is 8700 feet with 7-inch casing cemented at 8681 feet. After one perforation the well swabbed three days without showing, fluid failing to rise in the hole after being shut in overnight. Casing was reperforated Wednesday and swabbing was resumed Thursday. With 46 feet of gas-distillate saturation the test had been expected to be a commercial well.

Stanolind Oil & Gas Company has acquired 720 acres in Sections 24 and 25 and 35 and 36-21n-10w, Webster Parish, from Pardee Lumber Company and plans five lower Marine horizon tests.

Lisbon Well Output Down

Within one month the per well yield at Lisbon fell from 248 barrels to 184 barrels, an analysis of production there has revealed. Total cumulative production in that field to August 11 was 1,086,000 barrels.

J. R. Bevill's Alex Edmonds 1, NE NE 16-20n-5w, three miles southwest of Lisbon production after being repeatedly acidized without flowing consistently was prepared for standardization last week. Depth is 5413 feet in basal Glen Rose lime. The test logged 15 feet of saturation.

The producing limits of Lisbon proper were extended slightly in two directions last week. A. O. Olsen's T. F. Patton 1, NW SW 30-21n-4w, ½ mile north of production was completed at 5172 feet but was shut in for gauge awaiting erection of tanks. The same operator's J. T. Bean 1, NW NW 32-21n-4w, was completed flowing 60 barrels per hour through ½-inch tubing choke at total depth of 5166 feet.

Last week in Lisbon there were 28 tests drilling and 35 rigs, derricks and active locations.

H. F. Wilcox Oil & Gas Company has taken a 12,000-acre block of leases centering around Section 30-11n-6e, Franklin Parish.

NORTH LOUISIANA Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BOSSIER PARISH (Sligo)—		
United Gas P. S. Co., Murff A-2, 19-17n-11w	¶30	5120
Murff B-1, 17-17n-11w	¶30	5170
CADDO PARISH (Rodessa)—		
Magnolia Pet. Co., D. F. Barr 1 29-23n-16w	227	6060
R. W. Norton, Payne 1, 27-23n-16w	¶19	5980
Standard Oil Co. of La., McCoy 1, 10-23n-16w	1152	5974
McCoy 2, 10-23n-16w	1200	5964
CLAIBORNE PARISH (Lisbon)—		
Standard Oil Co. of La., F. B. King 3, 35-21n-5w	960	5300
A. O. Olsen, J. T. Bean 1, 32-21n-4w	880	5166

*Failures; †Junked; ¶Million cu. ft. gas.

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Four new Arkansas Rodessa wells

Shreveport.—The recently opened Miller County, Arkansas, extension of Rodessa increased its list of producers to 10 last week with 4 additional wells flowing and awaiting 24-hour gauge.

Wells completed and waiting on 24-hour gauge are: W. L. McClanahan's A. A. Capps 2, Section 11-20-28, flowing and swabbing after acidizing, at total depth of 6061 feet, top of the Hill 5864 feet, top of the Mitchell 6033 feet; Anding & Byrd's Skipper 1, NW SW 11-20-28, elevation 237 feet, total depth 6075 feet; Tom Potter's Larry & Vance 1, SE NW SW 11-20-28, and Roberts Brothers' W. W. Capps 1, SE NW SE 10-20-28, total depth 6121 feet.

ARKANSAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
HEMPSTEAD COUNTY—		
J. P. Birdwell et al, Duckett 1, 24-13-24	*	1620
FRANKLIN COUNTY—		
Ozark Nat. Gas Co., G. A. Sutherland 1, 13-8n-29w	¶9	2449
MILLER COUNTY—		
Odell Hinson et al, Montana Realty Co. 1, 3-17-28	*	5625
UNION COUNTY—		
Sklar Oil Corp., O. G. Murphy 1, 24-17-16	15	2148
Fitzgerald 1, 8-18-15	10	2140
Lion O. R. Co., M. Justiss 1, 19-18-17	435	6012

*Failures; †Junked; ¶Million cu. ft. gas.

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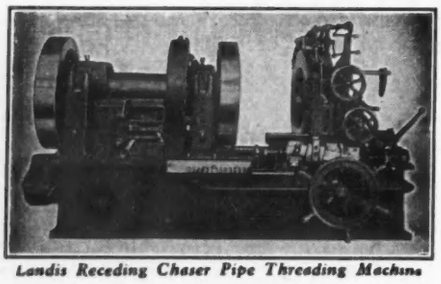

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CHARLIE HARTER

Located 370 feet south of the Arkansas line and between the 2-mile Arkansas offshoot of the field and the field proper, Roberts Brothers' E. G. Finley 1, NW NW 1-23n-16w, Caddo Parish, Louisiana, was arranging to acidize after swabbing and flowing 160 barrels of oil in 24 hours from 3 feet of Mitchell sand.

Arkansas has taken its place with Louisiana and Texas in a drilling campaign in Rodessa now having 21 active operations as compared to 26 on the Texas side of the field and 27 in Louisiana.

The use of air compressors to stimulate production may become a practice in Miller County. A compressor was used last week on one well in that extension and brought hourly production on one well up to 125 barrels per hour.

SOUTHEASTERN STATES

To deepen Scanlon dome wildcat test

Hattiesburg, Miss.—Cap rock and anhydrite section penetrated the past week by Sun Oil Company et al's Mrs. K. Talley 3, NW 33-4n-15w, fourth test for the Scanlan salt dome, Lamar County, carries asphaltic showings in the badly fractured section. Owners plan to drill considerable distance into the horizon, with a remote possibility of picking up a producing formation before reaching the salt plug. Top of cap rock was logged at 6201 feet, and first anhydrite at 6232 feet, with an elevation of 388 feet. The test was drilling in anhydrite at 6320 feet.

Jackson, Miss.—Sun Oil Company and B. B. Jones last week abandoned J. E. Wilson 1, SE SE 1-8n-2w, Madison County, Mississippi, at 5035 feet at the base of the Selma chalk which had been topped at 4617 feet; elevation was 218 feet. Salt water appeared at the base of the chalk.

This test, which was on a geophysical high, checked 1200 feet lower than Baker & Ridgeway's McRae 1, Section 24-7n-1w, Hinds County, which also was a test on a flank of the Jackson anticline.

In Wilkinson County, southwest Mississippi, H. L. Carnahan and associates were drilling at 4595 feet after salt water sand was logged at 4204-19 feet in the Cockfield which was picked up at 4113 feet, in Foster Creek Lumber Company 1, SW NW 1-2n-2w.

SOUTHEASTERN STATES Completions

MISSISSIPPI

Company, Well and Location	Init. Prod. Bbls.	Depth
MADISON COUNTY—		
Sun Oil Co. et al, J. E. Wilson 1, 1-8n-2w	*	5035

*Failures; †Junked; ¶Million cu. ft. gas.

NEW MEXICO

Lea County wildcat work to be increased.

Hobbs, N. M.—Expansion of wildcat operations in Lea County is likely to be fostered by the large companies now that major drilling programs are subsiding in the older fields. No discoveries have been recorded for the county since the series of strikes in 1935 and 1936 along the sandy-lime trend, extending north from the Langlie to the Hardy fields. This trend is only partially developed, and currently accounts for the majority of the operations. However, initial yield of wells is comparatively small and erratic while the ultimate recovery per acre will fall short of equalling the performance of the lime areas.

Monument and Eunice fields, occupying a single structure, reached the peak level of development several months ago, and current operations are largely on the rim of the producing area as now outlined. Owners of intermediate acreage are content to drill up their proved locations in a leisurely manner. North end of the Monument field is open for important extensions, but development is limited to progressive offsets.

West and north portions of Lea County afford the best wildcat prospects. No single area is commanding special interest as a wildcat prospect. A few tests are underway along projected trends from the Maljamar, Vacuum and Lynch fields, while the southwest portion of the county has lately received new consideration for the development of oil production from the Delaware series.

New discoveries will be needed by Lea County during the coming year to maintain its important position as a drilling center. Crude reserves have been pyramided to higher levels each year since 1926, but with withdrawals exceeding 100,000 barrels daily a reverse trend is in store for the county.

Several months have elapsed since the completion of an outstanding oil producer in Lea County. There were 16 completions the past week, including 14 oil wells, a gasser and a wildcat failure. Six areas shared the 12 new operations announced for this period.

Late completions included two flowing producers along the north line of the Eunice field. Repollo Oil Company's L. W. White 1, SE SE SE 24-20s-36e, flowed 180 barrels oil in 12 hours after using acid twice at 3861 feet. Rig has been skidded to drill White 2, NW NE SE 24-20s-36e. The Texas Company's State-Lieu-Lands 13, C SE SW 19-20s-37e, gauged 19 barrels hourly after treating saturated lime section at 3735-3870 feet twice with acid. This company's State 5-C, C NE NE 19-20s-37e, classed as Monument area, flowed by heads at 3865 feet, with an elevation of 3534 feet, and will be acidized.

Continental Oil Company et al's Sanderson 2-A-14, NE NW NE 14-20s-36e, southwest outpost for Monument, responded to acid treatment with a flow of 41 barrels of 32.5 gravity oil per hour on ¾-inch choke from lime at 3777-3875 feet, with an elevation of 3571 feet. Operations have been started on Sanderson

3-B-10, NE NE SE 14-20s-36e. Stanolind Oil & Gas Company is starting work on Gilluly 9-A, C NE NW 24-20s-36e.

Eunice Extension

Production on the south line of Eunice field was recently extended ¼-mile south by Mid-Continent Petroleum Corporation's Greer 3, C SE NW 21-22s-36e, flowing 388 barrels oil in 9 hours on ¾-inch choke. Rig has been skidded one location west to drill Greer 4. Continental Oil Company et al's Lockhart 1-B-30, C SE SW 30-21s-36e, indirect north offset to the discovery oil well of the Eunice field, showed for a small well after nitro shot and acid at 3965 feet. Hole was deepened to water at 4101 feet, with an elevation of 3635 feet, and has been plugged back to 3936 feet. The discovery well is flowing its proration allowable of 79 barrels daily, and has been on production since 1929. Atlantic Refining Company's State 2-P, C NE NW 25-20s-36e is a new operation for the northwest edge of Eunice.

Skelly Oil Company, principle lease owner in the Skelly field, sandy-lime trend, has started work on Ellen Sims 3, C SE SE 3-23s-37e, and R. R. Sims 6, C SW SW 3-23s-37e. This company's Harrison 1-B, C NE NW 9-23s-37e, failed to produce oil in drilling to 3690 feet, but gauged 10,000,000 feet of wet gas after nitro shot.

Federal permit requirements induced Continental Oil Company to start operations the past week on D. A. Warren 1, C SE NW 30-20s-38e, located 1 mile south by west of northernmost producers in the Hardy area. In the Penrose field, Bradley et al's E. N. Grizzell 1, C SW NE 5-22s-37e, and Ohio Oil Company's Grizzell 2, C NW SE 5-22s-37e, are new operations within the proved area. Shasta Oil Company, launching its first test in the county, has rigged up L. Woolworth 1, NE NE NW 28-24s-37e, Mattix field.

NEW MEXICO Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
LEA COUNTY (Eunice)—		
Atlantic, State 1-P, c se nw 25-20s-36e	2160	3850
Bert Fields et al, State-Turner 3, sw se nw 32-20s-37e	500	3843
Gulf, State Janda 1-D, c nw sw 2-21s-36e	120	3835
Mid-Continent, H. D. Greer 3, c se nw 21-22s-36e	2000	3830
Repollo Oil Co., L. W. White 1, se se se 24-20s-36e	360	3861
The Texas Co., State-Lieu 13, c se sw 19-20s-37e	500	3870
LEA COUNTY (Langlie)—		
Culbertson & Irwin, Inc.-Plains Prod. Co., Humphrey 1-A, ne nw ne 3-25s-37e	300	3470
Gulf, Westfall 2, c nw se 15-25s-37e	40	3418
Two States Oil Co., M. E. Stuart 1, sw nw sw 11-25s-37e	360	3410
LEA COUNTY (Maljamar)—		
Maljamar O&G Corp., Wm. Mitchell 3, c se ne 20-17s-32e	137	4073
LEA COUNTY (Mattix)—		
Stanolind, C. Myers 3, c ne se 4-24s-37e	50	3640
LEA COUNTY (Monument)—		
Continental et al, Sanderson 2-A-14, ne nw ne 14-20s-36e	2000	3875
Ohio Oil, State-Hansen 3, c w½ ne ne 16-20s-37e	1500	3887
LEA COUNTY (Penrose)—		
Gulf, Rinewalt 1, c sw nw 4-22s-37e.	275	3752
LEA COUNTY (Skelly)—		
Skelly Oil Co., B. F. Harrison 1-B, c ne nw 9-23s-37e	¶10	3690
LEA COUNTY (Wildcat)—		
J. W. Brown et al, State 1, c sw sw 22-21s-34e	*	4144

*Failures; †Junked; ¶Million cu. ft. gas.

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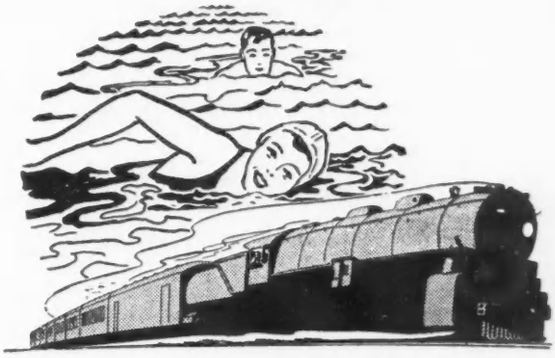

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Lance Creek east flank deep test reports water showing.

Casper, Wyo.—Water was reported in Ohio Oil Company's deep Minnelusa test well on the East flank of the Lance Creek field, Niobrara County, eastern Wyoming this week. Taylor 2 OPC-32, NWC NW SW 3-35n-65w, had the top of the Minnelusa sand at 5568 feet and cored to 5611 feet where water was reported in the cores. The hole bottomed at 5611 feet with no test of the formation to date.

A new test was started in the Lance Creek field this week by Continental Oil Company, which released location for Apex 1 Account 3, which will be drilled in SE NE 34-34n-65w. A near completion in the Basal Sundance producing sand of the Lance Creek field is Continental Oil Company's Otto Rohlff 8, SE SE 31-36n-65w, which set 7-inch casing at 3979 feet, above the Sundance sand topped at 4000 feet, and is swabbing to test. Well was shut in over night and showed 65 pounds casing pressure. Schuricht 5-B, Section 5-35n-65w, Lance Creek, topped the Sundance sand at 4004 feet this week and was carried ahead to 4059 feet. Hole is being reamed to set casing before testing.

Hole is being reamed to bottom at 5800 feet in Continental Oil Company's Tom Bell 10, CSW NW 34-36n-65w, Minnelusa well in the Lance Creek field. Top of the Minnelusa sand was found at 5283 feet when completed three weeks ago and was carried ahead to test the thickness of the formation. Report for this week did not state whether or not the well was still in the Minnelusa formation.

Ohio Oil Company's Lamb 10 Account 2, NE SE 5-35n-65w, Lance Creek, logged the top of the Minnelusa at 4728 feet this week and continued ahead. It is reported coring at 5066 feet with no oil or gas shows reported. Leo 1, OPC-7, NEC NW SE 35-36n-65w, another Ohio Oil Company well headed for the Minnelusa sand along the eastern border of the field, is drilling at 4345 feet in the Basal Sundance which was topped at 4316 feet.

On the north side of the Lance Creek field, J. M. Huber Corporation's Midwest 2, NE SE SW 27-36n-65w, is drilling at 2368 feet and Argo Oil Corporation's Ford 4, SW SE 33-36n-65w, in the northeast sector of the Lance Creek field, is coring at 5336 feet in the red beds, headed for the Minnelusa sand.

New Operations

New wells in the southern part of Wyoming were getting underway this week as operators were reported moving in material to the new locations from wells which for the most part were completed last week. On the Rock River field, Carbon County, Ohio Oil Company's Harrison-Cooper 12, SE SW 35-20n-78w, new location in the field is moving in equipment from Alba Dixon 8, which completed last week as a Dakota repressuring well.

The wildcat wells on Cherokee ridge and the Foote Creek structure, which were reported for the first time last week, are still moving in equipment.

A new well was started this week in the Lost Soldier field, Fremont County, Wyoming by Sinclair-Wyoming Oil Company; Lost Soldier 77 will be drilled in SE NE NE 10-26n-90w, with rotary equipment. Rig is up for the well and are waiting on tools.

In the Big Medicine Bow field, operated jointly by The California Company and Ohio Oil Company, Union Pacific-Cronberg 5, CNW¼ NW 25-21n-79w, is drilling at 4559 feet. Wm. Kyle SW¼ NE 26-21n-79w, is drilling at 4452 feet.

After testing water in the Basal Sundance sand at around 4200 feet, Mountain Fuel Supply Company's Charles Stone 1, SW SW 18-19n-103w, in the North Baxter Basin field, Sweetwater County, Wyoming, is coring at 4233 feet and may be carried ahead to test the Tensleep sands of the field. In the South Baxter Basin field, Sweetwater County, the company's Union Pacific 1, SW SE 13-17n-104w, an old well which is to be deepened, is still cleaning out hole to old total depth at around 3278 feet.

In the Clay Basin gas field, Daggett County, northeastern Utah, Mountain Fuel Supply Company's Keith Smith 1, SW NE 20-3n-24e, is waiting on cement to set around 13⅜-inch casing at 308 feet before drilling ahead.

Mountain Fuel's S. A. Duncan 1, 1-11n-100w, on the Shell Creek structure, Moffat County, northwestern Colorado, is still moving in equipment.

A lost core barrel which twisted off at 7858 feet in the Sinclair-Wyoming Oil Company's Muskrat 2-C, NE SW SW 1-33n-92w, deep test well in the Muskrat field, Fremont County, held up operations this week as special equipment was needed to fish out the lost equipment. Hole is bottomed in the Amsden lime below the Tensleep horizon.

In the Wertz field, Carbon County, Sinclair - Wyoming Oil Company's Wertz 11-A, SE NW NW 7-26n-89w, is waiting on cement to set around 9-

MOUNTAIN STATES Completions

MONTANA

Company, Well and Location	Init. Prod. Bbls.	Depth
GLACIER COUNTY (Cut Bank Field)—		
Glacier Prod. Co., Johnston Unit 1, ne ne sw 11-35n-5w	¶30	2724
Grant Oil Co., Ruetten, csw se 5-32n-5w	420	2948
TOOLE COUNTY (Kevin-Sunburst Field)—		
McKnight & Son & Pinkeny's Seabrook 5, nw ne se 19-35n-2w	35	1562
Ogden-Kevin Oil Co., Zachor 7, se sw nw 20-35n-1w	20	1535

COLORADO

Company, Well and Location	Init. Prod. Bbls.	Depth
ARCHULETA COUNTY—		
Wm. E. Hughes Estate, Burns 1, unsurveyed land in 32n-4e	*	1295
MOFFAT COUNTY (Powder Wash Field)—		
Mountain Fuel Supply Co., J. C. Donnell 1, ne se 21-12n-97w	¶4	3068

WYOMING

Company, Well and Location	Init. Prod. Bbls.	Depth
ALBANY COUNTY (Quealy Dome)—		
California Co., Wilson 4, cnw nw sw 18-17n-76w	96	3601
CARBON COUNTY (Allen Lake Field)—		
Ohio, Union Pacific-Wister 1, csw sw 17-22n-78w	¶40	1955

*Failures; †Junked; ¶Million cu. ft. gas.

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inch casing at 4326 feet. Hole is bottomed at 4084 feet.

In the Byron field, Big Horn County, northern Wyoming, Ohio Oil Company started building road this week to location for Sidon Canal 3, to be drilled in NW NW 24-56n-97w. The company's Baker-Byron 2, SW NW 23-55n-97w, is nearing critical stage this week as it set 7-inch production casing on top of the Embar lime formation at 5205 feet. Adam Pryde 1, CSW SE 24-56n-97w, Byron, is coring in Embar lime at 5832 feet with no shows of gas or oil reported. It topped the Embar at 5727 feet, considerably below the other wells in the field.

In the Garland field, Big Horn County, Peay Oil Company's Denio Mining & Milling Company 1, NE NE NE 15-56n-97w, is preparing to deepen from present depth at 3952 feet where it was held up for several weeks by a fishing job.

Yale Petroleum Corporation's Stock-Jones 1, SEC Lot 52-56n-97w, Garland field, is still fishing for drill collar at around 4050 feet total depth. Operators have recovered several sections of drill pipe.

Badger Basin Deep

In the deep Badger Basin field, Park County, northwestern Wyoming, where the pay formation is encountered at around 8000 feet in the Frontier horizon, Resolute Oil Company has 1 well nearing completion. Government 1, CNE NE 20-57n-101w, is making hole at 7010 feet. Northern Pacific 1, CNE NW 21-57n-101w, Badger Basin, is drilling at 3400 feet.

On the Park County, Wyoming, side of the Elk Basin field, Ohio Oil Company's Woods 15 OPC-3, 30-58n-99w, is rigging up rotary equipment. North extension test of the field, in Carbon County, Montana, Henderson Producing Company's 1-H-11 Elk, SE SE NW 35-9s-23e, is shut down for water at 890 feet.

The deep tests of Stanolind Oil & Gas Company in the Salt Creek field, were all reported getting underway this week. Cellar is being dug for its Wyoming Associated Oil Company-Tensleep, CNE NW 35-40n-79w, and Wyoming Associated Oil Company-Tensleep 29, CSW SW 26-40n-79w, is rigging. Wyoming-Tensleep 11, CNE SW 35-40n-79w, is building rig.

The deep well in the old field, Tensleep 8, which proved the commercial extent of the deep pool when it tested 1800 barrels three weeks ago, is being plugged back to 4000 feet where another test of the sands will be run. Location of the well is CNW SE 26-40n-79w and the top of the pay formation was encountered at 3892 feet.

Washington, D. C.—Bids for the lease of 320 acres of oil and gas land in the Bison Basin field, Wyoming, will be opened September 30 by the Register of the Land Office at Evanston, Wyoming, it has been announced by the Interior Department.

The lease will be awarded to the qualified bidder of the highest bonus, under the lease form shown in General Land Office Circular No. 1386.

The lands to be offered are described as the SW NE SE NW SW and W½ SE Section 17-27n-95w, 6th P. M., Wyoming.

MICHIGAN FIELDS

Two wildcats show oil; Buckeye extended westward.

* * *

Monroe County showing may revive interest southeast.

Mount Pleasant, Mich.—Two wildcat tests and a half-mile westward extension test of the Buckeye (Gladwin County) pool showed oil this week as the most important developments in Michigan. At the same time completions totaled 17, including failures on three outpost tests.

Major interest centered on Harold J. Hand's Smart 1, C N½ NE NW 29-17n-2e, Bentley Township, Gladwin County, 6 miles southeast of Dundee lime production in Buckeye of the same county. Dundee was topped at 3401 feet with a pay zone at 3479 feet where drilling was suspended for testing. Test showed 1600 feet of oil in 5-3/16-inch casing. This test is not seen as a Buckeye extension but more likely indicates a pool on the same structure farther southeast. A Dundee test in Section 15-17n-1e, Billings Township, was low and failed to show two months ago. It is midway between the Hand-Smart test and Buckeye production.

James E. Flanigan continued to test Shultz 1, NE SE NW 9-18n-1w, this week after picking up an oil-water pay in the Dundee at 3669 feet, 59 feet in the Dundee. It is ½ mile west of Buckeye production.

Five miles northwest of the Sherman-Isabella County pool, McHardy Syndicate's Gingrich 1, C W½ SE SW 12-15n-7w, Sheridan Township, Mecosta County, picked up oil saturation at 3860 feet and shut down at 3867 feet with water. It may be plugged back and treated.

The three failures recorded during the week were in Deep River Township of Arenac County, Crystal Township, Montcalm County, and in Colfax Township, Huron County, all Dundee lime tests.

Buckeye Field Extended

Buckeye in Gladwin County accounted for 7 new wells, with Sun Oil Company's Strochkirch 1, NE SE SE 4-18n-1w, rating a 750-barrel initial for the most important. It offsets to South Mammoth Producing & Refining Corporation's Wood 1, Section 4, which had a 360-barrel initial after acid and extended the Buckeye field northwest nearly a mile.

Harley Williams' Raae 1, Section 15-30n-1w, Otsego County, failed to show in the Dundee and will be drilled deeper for a Monroe lime test, owners reported. It is held up with a fishing job at 2480 feet.

McClanahan Oil Company has closed a deal to take over James Peirce's Mortensen 1, C SW 9-18n-5w, Clare County, for a Dundee lime test. Peirce drilled the test through the Michigan Stray with a 360,000-foot gas show and shut down in the Marshall sand at 1664 feet.

Producing 100 barrels initially from 2159 feet, 29 feet in the Trenton lime, A. V. Oil & Gas Company's Roe 3, Section 30-6s-6e, Monroe County, may revive drilling in southeastern Michigan. There has been sporadic development in the district for the past 10 years, and it is the only Trenton lime production in Michigan. The Trenton in the central part of the Michigan basin, about 7000-8000 feet, has never been drilled.

MICHIGAN

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ALLEGAN COUNTY—		
Lentz & Miller's Sebright 3, ne se se 17-4n-13w	610	1578
Mich Devonian's Brower 2, nw se se 17-4n-13w	700	1590
ARENAC COUNTY—		
Swanson Oil Co.'s Shephard 1, ne ne nw 9-20n-4e	130	2570
Fletcher & Leman's Shepard 1, c nw 9-20n-4e	¶½	1160
Hal Be Oyle's Peavy 1, se sw se 4-20n-4e	40	2580
B. A. Bartlett's Filip 1, ne nw se 32-19n-4e	*	3002
GLADWIN COUNTY—		
Gordon Oil Co.'s State A-5, se sw ne 36-18n-1w	200	3585
Ashley 1, nw nw sw 4-17n-1e	30	3608
Rex Oil & Gas Co.'s Woodring 1, nw sw se 23-18n-1w	50	3597
Wicklund Development's Campbell A4, nw nw nw 12-18n-1w	165	3638
Sun Oil Co.'s Luks 2, ne nw ne 10-18n-1w	200	3652
Strohkirch 1, ne ne nw 10-18n-1w	800	3650
M. Strokirch 1, ne se se 4-18n-1w	750	3675
HURON COUNTY—		
C. W. Teater's Haldane 1, se sw se 30-16n-12e	*	2993
MONTCALM COUNTY—		
Wolverine Natural Gas Co.'s Townsend 1, ne ne nw 11-12n-7w	¶30	1276
T. F. Caldwell, Inc.'s Ruedgers 1, se se nw 24-10n-5w	*	3238
MONROE COUNTY—		
A. V. Oil & Gas Co.'s Roe 3, ne ne nw 30-6s-6e	100	2159

*Failures; †Junked; ¶Million cu. ft. gas.

CALIFORNIA FIELDS

Kettleman Hills deep test coring dry below oil show.

* * *

Operators extend efforts for deeper production.

* * *

Wilmington area continues most active drilling area.

Los Angeles.—Kettleman Hills' outpost deep test, which means so much to operators in a large part of the North Dome, and which produced at a rate of 1215 barrels at 10,753 feet, is coring at 10,900 feet in barren sand, with streaks of oil sand growing thinner during the last 100 feet. This is Kettleman North Dome Association's No. 4-18J, Section 18-21-17. It is expected the hole will be cored until trouble is had, or until more oil sand is found. When the well was tested at 10,753 feet, it flowed 1100 barrels of 46 gravity oil and 19,500,000 cubic feet of gas. If no more oil sand that looks good is found, the hole can be plugged back to the original flowing depth.

Kettleman North Dome has long been known as a "deep" field, many wells being completed at close to 9000 feet. In the early life of the field the upper gas zones were included in the open flowing area, and in this manner the production was high gravity, due to condensation of the gas, with the lower portion of the producing zone furnishing the oil. In later years, the higher gas zone has been cased off, thus lowering the gravity, but increasing the yield of oil.

Standard Oil Company is drilling four wells on North Dome and Kettleman North Dome Association has seven active strings of tools. Standard Oil Company is preparing to start three new holes and North Dome Association is getting ready to start one. Superior Oil Company is reconditioning Huffman 5 in Section 29-21-17, with present bottom at 8680 feet. In this hole, 9⅝-inch had been cemented at 7507 feet, and more hole could be drilled if owners decided on this course. Standard Oil Company's No. 3P-4, Section 3-22-17, is drilling in hard sand at 7792 feet, with 9⅝-inch cemented at 7540 feet; No. 41, Section 33-21-17, with bottom at 8225 feet, has cemented 7-inch at 7558 feet.

One on Middle Dome

The middle dome at Kettleman Hills is the scene of only one drilling project. Temblor Oil Company's Bunting 1, 25-23-18, is drilling at 7820 feet in brown shale, with 9⅝-inch cemented at 5950 feet. The cementing of this size casing permits the drilling of considerable more hole with a fair sized hole, without setting any more casing. Progress of this hole is being watched with interest.

The interest in California is being centered about 50-50 between efforts to develop new and deeper zones in proven fields and the finding of new fields. The drilling of extreme depth holes seems to be more spectacular, but interest holds up on wildcats. The operators seem to feel that a new deeper producing zone is just as important as the proving of a new field. During the past week, nine dry holes have been reported among wildcat drilling projects of the state. Only two dry holes were reported for the previous week. During July, 16 dry holes were reported.

Another hole more than 10,000 feet in depth is Continental Oil Company's K.C.L. B-1, Section 12-29-26, Kern County, which is bottomed at 10,205 feet. This test is in the Rosedale area and is fishing for drill pipe with top at 7802 feet. Seaboard Oil Company-Tide Water Associated Company's K.C.L. C-1, Section 26-27-24, in the Wasco area of Kern County, is bottomed at 10,213 feet and is shut down. Last casing in this hole was 7-inch at 9148 feet. In the Lerdo area of Kern County, Arkelo Petroleum Company's Arkelo 41, a wildcat, Section 23-28-26, is bottomed at 10,056 feet, and after sticking the drill pipe, hole is being reamed at 7650 feet. In the Rio Bravo area of Kern County, Union Oil Company's Kernco 1-34, Section 34-28-25, total depth 10,333 feet, has recovered lost cutters, and is coring at 10,354 feet. Formation from 10,320 feet to present depth runs largely to brown shale, with little oil sand being cored. At 10,310 feet tester showed a lot of salt water.

In the Dominguez field, in Los Angeles Basin, Union Oil Company's Callender 50, with bottom at 10,435 feet, has plugged to 8665 feet, perforated from 6781 to 7640 feet, and swabbed oil and water. Further work will be done on the hole. At Santa Fe Springs, Union Oil Company's Bell 100, deep test for the field with old bottom at 10,789 feet, after sticking drill pipe, is redrilling at 7825 feet. Last casing cemented was 8⅝-inch at 7427 feet.

Two Deep Tests at Wilmington

In the Wilmington field near Long Beach, two deep tests are in progress. General Petroleum Corporation's Ford 18 is drilling at 5416 feet, in sand and shale. Royalty Service Corporation's Gilmore 842-2, has bottom at 5365 feet, in shale and sand. With bottom at 5300 feet, formation tester showed good for 400 barrels of oil per day. These two wells are trying to develop a new and deeper sand, which General Petroleum Corporation found in its discovery well for the field, but which refused to produce at the time.

The Wilmington field is the most active drilling area in the state at this time. Union Pacific Railway Company, recently a new comer to producing circles in California, is drilling nine holes, reports 12 rigs, and eight locations. Practically every location drilled is an offset. One of the latest concerns to become interested in the Wilmington field is Superior Oil Company and recently this company announced locations for five holes to be drilled at once.

The latest activity in Orange County, is in the Yorba Linda field extension, where the completion was good for 50 barrels at 1947 feet. The first completion was Richfield Consolidated Oil Company's Todd 1, which was good for 100 barrels at 1760 feet. William Alexander is building rig for his No. 1, in this area of the old field. Backmann Petroleum Corporation's Tuffree 1 is bottomed at 1772 feet and has landed 10¾-inch on bottom. Beverly Hills Petroleum Corporation has rig up for No. 1 test, and F. E. Fairfield has two new rigs up. Signet Oil Company has rig up for its second test for the area.

CALIFORNIA
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
FRUITVALE—		
L. C. Simmel, Stc. No. 2-1	300	3349
Western Gulf, K.C.L. B-26	105	4000
KERN FRONT—		
Standard, Ward Fee 7	130	2015
MOUNTAIN VIEW—		
Hogan Pet. Co., Porter Day 10	500	6017
MIDWAY-SUNSET—		
Texas Co., No. 23	300	3004
Union Oil Co., Boss 2	30	5500
SANTA MARIA VALLEY—		
Union Oil Co., Enos 1-19	40	2796
SANTA MARIA—		
Union Oil Co., Squires 19	170	4278
EL CAPITAN—		
Shell Oil Co., Covarrubias 1-25	175	2786
LONG BEACH—		
Coastal Oil & Gas Co., No. 1	100	4610
WILMINGTON—		
Bankline Oil Co., P.T.C. 20	300	3387
Royalty Service Corp., Santa Fe A-3	125	3600
Santa Fe B-4	300	3620
Sonwell Oil Co., No. 2	500	3634
Union Pacific, Offset 9	475	3619
YORBA LINDA—		
Signet Oil Co., Signet 1	50	1947
HUNTINGTON BEACH—		
W. P. R. Oil Co., No. 3	50	4970
EL SEGUNDO—		
Sunset Oil Co., Pacific Land 1	*	7865
KERN FRONT—		
Kern Dr. Co., R. R. 1	*	2333
MOUNT POSO—		
Ring Oil Co., Vedder-Hyde 1	*	1838
FRESNO COUNTY—		
Western Gulf, Skelley Est. 1	*	6528
KERN COUNTY—		
General Pet. Corp., Umbsen 1	*	6070
Geo. Goodrum, Baron 1	*	320
Kern Leasing Co., No. 2	*	1200
Freemont Oil Co., Olcese 1	*	2826
Wilshire Oil Co., Tejon 1	*	5405

*Failures; †Junked; ¶Million cu. ft. gas.

IMPORTANT WILDCAT TESTS

ALABAMA

CHOCTAW COUNTY—Joe Modisett et al's McCorvey 1, se sw sw 20-9n-2w, elev 120 ft, top Selma chalk 1865 ft, dr 2412 ft, chalk.

GREENE COUNTY—Greene County Dev. Co.'s R. C. Lett 2, se nw 5-21n-2e, arr deepen 115 ft.

HOUSTON COUNTY — Rice O&G Co.'s Oakley Est. 2, nw sw 9-3n-29e, sd 4975 ft.

ARKANSAS

ASHLEY COUNTY — Phillips Pet. Co.'s Stillions Lbr. Co. 1, s½ sw nw 18-17-9, dr 5181 ft, shale & sand.

CROSS COUNTY — Manning & Martin, Inc.'s Park-Gieseck 1, nwc ne ne 4-6n-5e, rur.

CLEVELAND COUNTY—J. R. Lockhart's Hernsberger 1, se ne 16-11-13, dk. Robertson 1, se ne 36-10-11, co td 3536 ft.

COLUMBIA COUNTY—Robt. Keen's Runyon 1, se ne 1-16-21, elev 199 ft, sd 960 ft, shale. Standard of La.'s McKean 1, c sw sw 8-16-22, elev 257 ft, chalk 1883-2163 ft, top Tokio 2763 ft, top Travis Peak 4301 ft, brown sand asphaltic stain, no saturation on 4680-4707 ft, sd 4735 ft, high water.

CRITTENDEN COUNTY — Stanley Oil Corp.'s D'Anna 1, 18-8-9, claim so 1366-87 ft, arr make ds test td 1387 ft.

DREW COUNTY — Sloan Wells et al's Hardy 1, se nw 3-14-7, rur.

HEMPSTEAD COUNTY—Easton, May & Murdock's LaGrone 1, ne ne 5-12-16, top anhydrite 1534 ft, top Travis Peak 2164 ft, dr 2402 ft, red beds. Davidson & Todd's Smith 1, sw se 1-11-25, sd 2005 ft.

LONOKE COUNTY—Frank Silver's Chambers Est. 2, ne nw 17-2-7, 7-in csg 1489 ft, tested sw, arr re-cemtd csg & test again td 1500 ft. Al Demurs' High 1, ne sw 25-1n-9w, sd 512 ft. Jas. E. Russell's Gunter 1, 17-5-10, dk.

MADISON COUNTY—J. E. & Jno. Hardy's Hamlin 1, sw nw se 8-16n-26w, mim.

MILLER COUNTY—F. W. Burford's Garver-Means 1, sw nw 11-20-27, rur. August 1, e½ sw 8-20-27, lcn.

NEVADA COUNTY—W. E. Lokey, Tr.'s Purifoy 1, ne ne 17-11-20, sd 1420 ft.

OUACHITA COUNTY — Copenhaver Oil Corp.'s J. E. Evans 1, 20-11-19, co td 1730 ft. Tide Water Associated & Seaboard's S. A. Graves 1, ne se nw 33-13-18, elev 189 ft, top anhydrite 3855 ft, dr 4285 ft, red shale & sand.

PIKE COUNTY—Beckwith et al's Hendricks 1, c nw se 16-8s-25w, sd 312 ft. Wallace & Neill's Tilyou 1, se se 26-8s-24w, rur.

SALINE COUNTY — Duncan & Bivens' Williams 1, nw ne 18-3-15, sd 104 ft.

UNION COUNTY — W. D. Wingfield's Southern Kraft 1, sw ne 18-16-14, elev 124 ft, dr 4500 ft.

CALIFORNIA

FRESNO COUNTY

CANTUA—Western Gulf Oil Co.'s Skelley Estate 1, 32-16-15, td 6528 ft, abn.

KERN COUNTY

LERDO—Arkelo Pet. Co.'s Arkelo 41, 23-28-26, td 10,056 ft, r 7650 ft.

BENA—Bacal Oil Corp.'s No. 1, 5-30-30, sd 1790 ft. Cajalco Pet. Co.'s Brown-Pallette 1, 9-30-30, sd 3570 ft.

McKITTRICK—Birch Rauch Oil Co.'s Lovitt 1, 10-30-21, dr shale 1150 ft.

WASCO—Continental Oil Co.'s K.C.L. A-2, 8-27-24, dr brown shale 9821 ft. Seaboard Oil-Tide Water Associated's Continental K.C.L. C-1, 26-27-24, sd 10,213 ft.

ROSEDALE—Continental Oil Co.'s K.C.L. B-1, 12-29-26, td 10,205 ft, fsh dr pipe 7802 ft.

DEVIL'S DEN—Den Pet. Co.'s Bates 1, 20-25-19, td 4318 ft, redr to 4312 ft, repairing equip. Geo. Goodrum's Baron 1, 24-25-18, td 320 ft, skidded rig to No. 1-A, abn; No. 1-A, td 125 ft, sd. Lube Oil Co.'s Gordon 1, 2-25-18, sd 4280 ft.

ROUND MOUNTAIN—Freemont Oil Co.'s Olcese 1, 26-28-29, sd 2820 ft. Rudolph Pagerman's No. 1, 10-28-29, rig. Pebble Beach Oil Co.'s Olcese 1, 16-28-29, td 1703 ft, plug 415 ft, set 8⅝ in at 395 ft, was wet, sd.

ABBREVIATIONS

The following abbreviations, signs, etc., are used in completions and wildcat reports in THE OIL WEEKLY.

*—*dry hole abandoned well.*	owdd—*old well drilling deeper.*
‡—*salt water (completions).*	owpb—*old well plugging back.*
†—*junked and abandoned.*	pb—*plugged back or plugging back.*
¶—*million feet of gas.*	r—*reaming.*
abd—*abandoned.*	rog—*rig on the ground.*
bbls—*barrels.*	rur—*rigging up rotary tools.*
br—*building rig.*	rust—*rigging up standard tools.*
b.s.—*basic sediment.*	sd—*shut down.*
csg—*casing.*	sdtr—*sidetracking.*
co—*cleaning out.*	sg—*show gas.*
dd—*drilling deeper.*	si—*shut in.*
dk—*derrick.*	so—*show oil.*
dr—*drilling.*	so&g—*show oil and gas.*
fsg—*fishing.*	spd—*spudding.*
ft—*feet.*	sr—*straight reaming.*
hfw—*hole full of water.*	sw—*salt water.*
in—*inches.*	td—*total depth.*
lcn—*location.*	ur—*underreaming.*
m—*milling.*	wih—*water in the hole.*
mim—*moving in materials.*	wo—*workover.*
mit—*moving in tools.*	wocs—*waiting on cement to set.*
mot—*milling on tools.*	wosr—*waiting on standard rig.*
n, s, e, w—*north, south, east, west.*	
oih—*oil in hole.*	

ARVIN—General Pet. Corp.'s Honchin 1, 27-31-29, dr shale 3526 ft.

BELRIDGE—General Pet. Corp.'s St. Helens 1, 12-28-20, lcn.

PREMIER—General Pet. Corp.'s Umbsen 1, 36-27-26, td 6070 ft, plug 725 ft, abn.

NO. KERN RIVER—Hub Oil Co.'s No. 1, 8-28-28, sd 3320 ft.

SAN EMIDIO—Kern Leasing Co.'s No. 2, 14-10-23, abn 1209 ft. Union Oil Co.'s Kernco 1-34, 34-28-25, td 10,333 ft, co to 10,310 ft, fishing cutters; Morrison 1, 31-11-22, td 2075 ft, plug 765 ft, set 8¼ at 410 ft, bailing mud and water.

GRAPEVINE—Ohio Oil Co.'s T.I.T. D-1, 21-11-19, td 9625 ft, plug 5972 ft, perforated 5170 to 5270 ft, bailing, no showings. Reserve Oil & Gas Co.'s Tejon 33-2, 33-11-19, td 4505 ft, redr to 4476 ft, to rerun liner with larger perforations; No. 4, 33-11-19, td 5444 ft, to run liner and test.

KERN FRONT—Pacific Oil & Gas Dev. Co.'s Davidson 1, 36-27-27, foundation.

ELK HILLS—Richfield Oil Corp.'s Buena Vista 1-A, 7-31-25, dr shale 1710 ft.

MOUNTAIN VIEW—Section Six Oil Co.'s Johnston 1, 6-31-29, rur. Union Oil-Standard's Barnbeltz 1, 1-30-28, lcn.

TEN SECTION—Shell Oil Co.'s Canal 21-14, 14-30-25, td 8613 ft, plug 8232 ft, sd, to drop from report.

FRUITVALE — Shell Oil Co.'s Bellevue A-36-31, 31-29-27, dr shale 8584 ft. Southwestern Dev. Co.'s K.C.L. 1, 15-29-27, dr shale 3590 ft, oil sand 3529 to 3548 ft, to run formation tester.

KERN RIVER—Sleeper Ridge Oil Corp.'s No. 1, 15-29-29, sd 50 ft. Well Developers' No. 1, 16-28-28, rig.

McGUNDEN—Standard's Routzong 1, 2-30-28, lcn.

GREELEY—Superior Oil Co.'s K.C.L. 9, 3-30-26, rur.

ROUND MOUNTAIN—J. J. Tavis-Olcese, Tavis 1, 4-29-29, dr shale 2997 ft.

SOUTH MARICOPA—Texas Co.'s K. C. Wallace 1, 33-11-23, rur. Was Pioneer Unit Plan 1.

MISCELLANEOUS

HUMBOLDT COUNTY—Texas Co.'s Eureka 2, 22-3-1, td 7708 ft, plug 6473 ft, tubing stuck, fsh.

KINGS COUNTY—Ray Bisconer's No. 2, 11-24-20, sd 1650 ft. Central Calif. Utilities Co.'s Kettleman-Lakeview 3, 11-23-19, td 1202 ft, plug 1190 ft, sd. Dudley Ridge Dev. Co.'s No. 2, 24-23-20, dr shale 3570 ft. Kettleman View Oil & Gas Co.'s No. 1, 9-22-19, sd 4787 ft. Glen C. Stone's Teeter 1, 25-20-20, sd 1315 ft. Tri-Counties Oil Co.'s Olson 1, 10-23-22, sd 5819 ft. Carl W. Weller's Del Sable 1, 11-23-16, lcn.

MADERA COUNTY—Seaboard Oil Corp.'s Associated General, Gill 1, 27-12-15, dr gray sand 2930 ft.

SOLANO COUNTY—Amerada Pet. Co.'s J. C. Hamilton 1, 24-4-2, td 4429 ft, gas well, shut in; Neil Hamilton 1, 36-4-2, td 4450 ft, top gas zone 4040 ft, to run formation tester. Tracy Dr. Co.'s No. 1, 25-4-2, rig.

SAN MATEO COUNTY—Wilshire Oil Co.'s Cowell 1 (Half Moon Bay), 20-6-5, rig.

SUTTER COUNTY—Buttes Oil Fields' No. 4 (Marysville Buttes), 2-15-1, td 5850 ft, gas well, shut in.

TULARE COUNTY—Amalgamated Oil &

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Tried and proved . . . for reconditioning, degassing, cleaning and maintaining uniform weight of mud. Successfully used in oil fields throughout the world. Send for Folder No. 1672.

LINK-BELT COMPANY

PHILADELPHIA LOS ANGELES DALLAS HOUSTON TULSA

Gas Corp.'s A. O. G. 3, 29-24-24, rur. E. P. Jennings' No. 2, 33-23-23, td 2030 ft, rep equip. Standard's Morris 1, 36-24-23, dr shale 7433 ft. Tulare Dome Oil Co.'s Tulare Dome 1, 17-21-23, dr shale 2590 ft. L. E. Turner's Glaze 1, 15-22-26, sd 3282 ft.

YOLO COUNTY—Empire Oil & Gas Co.'s No. 1, 8-9-3, lcn. Standard's Hopper 1, 32-9-1, td 3387 ft, set formation tester 3675 ft, good for 6,000,000 ft gas and salt water.

MONTEREY COUNTY — Amil A. Anderson's Hillman 1, 15-24-14, dr shale 1610 ft. California Oils' No. 2, 33-23-15, lcn.

SAN LUIS OBISPO COUNTY—Burkholder Oil Corp.'s Clay 1, 14-10-26, dr shale 3990 ft. Hancock Oil Co.'s Dicks 1, 30-12-33, td 672 ft, in shale, lost circulation. Dorothy Leingang's Leingang 1, 32-16-26, dr shale 410 ft. A. O. Lewis' Pecho 1, 34-30-10, td 2750 ft, wocs 6⅝ in at 2350 ft. Temblor Oil Co.'s No. 1, 22-31-21, to 3050 ft, swabbing water. Vanguard Oil Co.'s Clark 1, 26-27-14, rur.

SANTA BARBARA COUNTY—E. C. Arnold's Apache 2, 8-8-33, dr shale 5804 ft. Crude Oil Dr. Co.'s Crude 1, 19-9-34, dr shale 425 ft. Gaviota Oil Co.'s Hollister 1, 35-5-33, dr brown shale 2690 ft. Hancock Oil Co.'s Los Alamos 2, 6-7-32, dr fractured gray shale 5230 ft. Leora Oil Co.'s Fithian 1, 8-4-25, sd 1025 ft. Mid-Western Oil Co.'s Midwest L-1, 28-4-27, sd 2054 ft. Nine Springs Oil Co.'s Brinkinhoff 1, 9-7-30, sd 3300 ft. Tide Water Associated's Leonis 1, 3-6-33, dr brown shale 2640 ft. United Western's No. 1, 16-7-30, rur. Valley Oil Co.'s Chief 1, 20-9-34, td 2315 ft, bailing. Vista Del Mar Oil Co.'s Williams 1, dr red shale 3450 ft.

SANTA CRUZ COUNTY—Elba Oil Co.'s Elba 1, 6-12-1, dr shale 4050 ft.

VENTURA COUNTY — Oxnard Oil Co.'s Vanoi 1, 10-1-22, dr shale and gray sand, streaks oil sand 3980 ft. Richfield Oil Corp.'s McFarland 1, 13-2-21 dr shale 2072 ft. Seven Seas Oil Co.'s Johnson 1 (Oxnard) 15-1-22, foundation. Speik Oil Co.'s Speik 1, 35-5-19, dr shale 3010 ft. Vaca Oil Explor. Co.'s Livingston 1, 6-1-21 (Oxnard), dr shale 2790 ft.

SOUTHERN CALIFORNIA

NEWHALL—Barnsdall Oil Co.'s Rancho S. F. 2, 26-4-17, dr shale 4924 ft. Holbrook Pet. Co.'s Newhall Land 28-4-16, dr hard shale 6016 ft.

PICO CANYON—A. G. Burt's No. 1, 36-4-17, dr hard sand 2060 ft.

LYNWOOD—Calizoo Oil Co.'s Saulque 1, 9-3-13, td 7520 ft, plug 5800 ft, ran formation tester, sd.

NORTH LONG BEACH—Geo. L. Clayton's Clayton 1, 32-3-12, dr sand and shale 5160 ft.

FOX HILLS—Country Club Oil Co.'s Country Club 1, 19-2-14, sd 4986 ft.

PALMDALE—Wm. S. Diller's Lindsay 1, 20-5-11, td 1135 ft, in sandy shale showing oil, recemented 8⅝ in at 530 ft.

SUNSET BEACH—A. S. Johnston Dr. Co.'s No. 30, 20-5-11, dr sand and shale 4150 ft.

WALNUT—Julian & Criswell's Langstaff 1, 5-2-9, td 2370 ft, r.

PALOS VERDES—McClaren Bros.' No. 1, 27-4-14, td 3970 ft, preparing to test on pump.

PLAYA DEL REY—Metropolitan Oil Co.'s No. 1, 34-2-15, deepened 41 ft into Schist to 6541 ft, r.

PUENTE—Simaroo Oil Co.'s Puente 1, 33-1-9, lcn.

DEL REY-VENICE—Sharby Oil Co.'s Santa Monica Dairy 2, 22-2-15, dr shale 6570 ft.

MONTEREY PARK—Wales Pet. Co.'s Haig 1, 26-1-12, sd 3460 ft, equip removed.

ORANGE COUNTY—Amalgamated Oil & Gas Co.'s Parr Com. 1, 22-3-9, lcn. Shell Oil Co.'s Harbeson 1, 9-4-10 (Anaheim), dr shale and sand 3891 ft. West American Oil Co.'s Irvine Ranch 1 (near Tustin), 14-5-9, td 6070 ft, set plug at unknown depth, swabbing and testing, but no information available.

SAN BERNARDINO COUNTY—Quartermaster Oil Prod. Co.'s No. 1, 21-5-6, (Victor Valley), lcn.

FLORIDA

LAKE COUNTY—Oil Dev. Co. of Fla.'s Gulf Explo. Co. 2, se se 17-24s-25e, elev 120 ft, arr acidize & re-test at 2600 ft, old td 6126 ft.

LEVY COUNTY—Fla. Oil Discovery Co.'s Sholtz 2, sw ne 9-15s-13w, elev 25 ft, woc surf csg.

NASSAU COUNTY—St. Mary's River Oil Corp.'s Hilliard Turpentine Co. 1, nw nw se 19-4n-24e, elev 110 ft, dr 2805 ft, sandy lime last report.

POLK COUNTY — Edw. A. Hill's Polk County Lbr. Co. 1, nw ne 32-25s-25e, dk.

SUWANEE COUNTY—Wm. G. Blanchard's Lucy Cotton 1, se ne 35-3s-11e, spd.

KANSAS

BARBER COUNTY—Olson and Skelly's Elsea 1, sw se nw 27-32-14w, dr 1930 ft. Helmerick & Payne et al's Blunk Estate 1, c se 18-34-13w, spd and woc. W. I. Southern, Inc.'s Davis 3, se ne 24-34-15w, dr plugs 4572 ft.

BARTON COUNTY—Phillips Pet. Co.'s McClanahan 1, ne se 7-16-13w, test oil 3377 ft. Ralph Wixson et al's Buhrle 1, se ne 14-16-13w, dr 710 ft. Stanolind et al's National Bank 1, se sw 36-16-13w, 3425 ft, D&A. Republic Natural Gas, Bloomer 1, ne nw nw 14-17-11w, 2700 ft oih 12 hrs, td 3338 ft sil lime. Sam Murphy's Beck 1, nec 17-17-12w, hfw 3419 ft, D&A. Armes & Vernon O&G Co.'s Parson 1, sw se 7-17-13w, spd and sd. Vickers Pet. Co.'s Lucas 1, nw nw ne 16-17-14w, fsg 2660 ft. C. L. Price's Hammeke 1, ne sw 12-18-12w, test oih 3427 ft. Helmerick & Payne's Sessler 1, sw se 29-20-11w, pb and shot 40 qts, co 3405-3414 ft. J. B. Hanna's Luce 1, swc 21-20-13w, 1000 ft fluid in hole after acid, mostly water, td 3428 ft.

CHASE COUNTY — Calif.-Ill.-Kans. Oil Co.'s Hughes 1, sw nw se 13-22-9e, 2599 ft, woc.

BUTLER COUNTY—Rex & Morris et al's Stephens 1, sw se 35-23-3e, dr 425 ft. Saco Oil Co.'s Cotton 1, sw se 16-28-6e, dr 2780 ft.

CHAUTAUQUA COUNTY—C. L. Brosius et al's Garett 1, nw sw nw 26-32-11e, 6 inch 1940 ft. Craft's Lagree 1, se nw ne 8-32-12e, td 2080 ft and pb 700 ft, est 4 bbls opd. S. H. Vineard, Hughs 1, ne se 13-32s-12e, sd 400 ft. Robinson et al's Foster 1, swc 6-33-12e, td 1986 ft, pump average 6 bpd with ¼ w. Harrison's Brown 1, ne se ne 19-34-10e, dr 215 ft.

COWLEY COUNTY—E. B. Shawver's Fee 1, nw ne se 3-30-4e, dr 2555 ft. Rex & Morris et al's Lanier 1, ne nw 10-30-5e, dr 2535 ft. National Refining Co.'s Schwante 1, nw sw ne 16-32-3e, dr 2729 ft. Lewis Prod. Co.'s Feaster 1, se nw sw 36-32-3e, 3520 D&A., Pryor & Lockhart's Brown 1, ne se se 34-33-3e, lcn abd., C. R. Ross et al's Walker 1, nw se 5-33-11e, dr 2100 ft.

EDWARDS COUNTY—Douglas & Gear's Meade 1, se nw 35-25-16w, dr 2700 ft.

ELLIS COUNTY—Earl Wakefield et al's Burnett 1, nw ne 1-11-18w, co 2835 ft. Billing's Smith 1, se nw 14-12-16w, Pot. 572 bbl oil after acid Sil. 3370 ft. Western Kansas Oil & Ref. Co.'s Schmeidler 1, nwc 22-12-17w, ur 8-inch 3080 ft. Lario O&G's Ball 1, nw ne 8-12-18w, dr 1070 ft. P. G. Reynolds et al's Karlin 1, nwc 13-12-18w, sd 850 ft. Skiles et al's Hensen 1, sw se ne 26-12-18w, csg 1403 ft. Colonial Oil Co.'s Albert 1, se ne 31-12-18w, spd. L. M. Reynolds et al's Poloyn 1, se ne 24-13-16w, dr 355 ft. Brunson Drg. & Glimac Oil Co.'s Weisner 1, se sw se 31-13-17w, dr 1385 ft.

ELLSWORTH COUNTY—Equity Gas et al's Razac 1, ne se 31-15-10w, dr 2340 ft. Colonial Oil Co.'s Hogy 1, nw nw sw 16-16-10w, pits. Skiles et al's Sturn 1, se sw 31-17-9w, dr 3248 ft., sw.

GRANT COUNTY—Panhandle Eastern P. L.'s Blake 1, c sw 21-30-36, dr 2365 ft. Panhandle Eastern P. L.'s Taggart 1, Cen. 11-30-37w, 2501-2531 ft. 2.75 thousand feet of gas after 50 quarts.

GREENWOOD COUNTY—Ward McGinnis et al's Henley 1, swc 25-25-9e, cem 6-inch after pb, woc.

HAMILTON COUNTY—Denver P & R's Porter 1, sw ne 30-25-41w, dr 6442 ft.

HARPER COUNTY—Magnolia Pet. Co.'s Freeman 1, se nw sw 3-31-6w, dr and core to 4838 ft. in Sil lime.

HARVEY COUNTY—E. J. Shaffer et al's Epp 1, sec 15-23-3w, 3915 ft., D&A.

KEARNEY COUNTY—J. L. Murphy's Masonic Home 1, cne 1-26-36w, dr 1610 ft.

KINGMAN COUNTY—Carter Oil Co.'s Davis 1, ce¼ ne ne 24-28-8w, rur.

LOGAN COUNTY—Morgan, Flynn, Cobb et al's McMillian 1, c nw 9-13-37w, sd 3489 ft, for reprs.

LYON COUNTY—Davis & Sory's Byrd 1, sw se 32-21-11e, td 1913 ft, 200 ft. oih, co after 160 qts.

MARION COUNTY—Hutchinson O&G Co.'s Ehrman 1, se se sw 15-18-1e, dr 2438 ft. Western Kan. O&Ref. Co.'s Suderman 1, 22-20-2e, dr 2675 ft.

McPHERSON COUNTY—C. E. Ash Drilling Co.'s Broman 1, ne nw 19-17-4w, dr 1110 ft. Wamhoff et al's Nuse 1, se ne sw 18-18-4w, sd 1850 ft. Fred C. Frank et al's Doles 1, ne nw ne 12-19-1w, dr 2660 ft. Clyde Pulse et al's Boesker 1, se nw 29-20-1w, rig, Bradley Bros. Barnholt 1, sw se 30-20-5w, pump 50 bbl. o. 8 hrs., trace water.

MITCHELL COUNTY—Geo. Siedhoff et al's Greiss 1, nw sw se 16-8-10w, so&g 3565 ft., dr 3772 ft.

NESS COUNTY—Newton Dev. Co.'s Tenny 1, nw se 19-18-25w, td 4406 ft. with 3500 ft. oih, sd., Jones and Lane Page Milling Co.'s 1, se nw 36-18-26w, sd 1060 ft.

OSBORNE COUNTY—J. E. Waldron's Neusechwanger 1, se ne nw 11-8-14w, spd & sd., Lemmick Oil Co.'s Marble Savings Bank 1, cne ne 26-9-14e, rig. Fred C. Chaddox & Atlantic's Slater 1, ne sw ne 33-10-15w, sd 1270 ft. F. E. Fullerton & Son's Moray 1, ne se sw 27-10-12w, rot at 50 ft., sd.

PHILLIPS COUNTY—C. W. Davidson et al's Elliff 1, se ne ne 35-5s-18w, spd 350 ft. and sd.

PRATT COUNTY—Atlantic, Empire & Skelly's Runyon 1, sw nw ne 11-27-13w, est. abt 1½ bbl oil hr., 4290 ft. in Simpson. Skelly Oil et al's S. B. Adams 1, se nw ne 2-28-11w, KC lime, 3542 ft., rust.

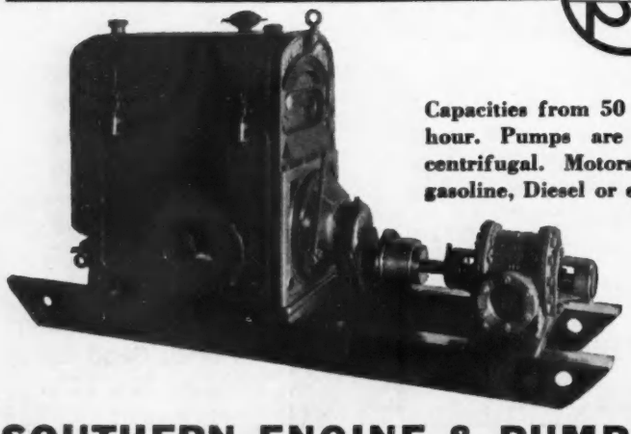
RENO COUNTY—Sam Schneider et al's Kroecker 1, nec 12-22-5w, sd 480. Imo Oil & Gas Co.'s Watkins 1, sec 14-22-7w, 3560 ft. D&A. Helmerick & Payne et al's Haines 1, swc 9-25-5w, dr 3763 ft. Pryor & Lockhart et al's Stuckey 1, nw sw sw 31-25-5w, sso 3510-3515 ft., dr 3610 ft. Street & Butler's Kincaid 1, ne nw 13-24-4w, rig. Carey et al's McPheeters 1, ne ne nw 22-26-8w, ru.

RICE COUNTY—Gillespie et al's Strong 1, ne nw 9-18-8w, ru. John Hanna et al's Marshall 1, ne nw nw 30-18-8w, 10-inch, 1440 ft., sd 1515 ft. Bridgeport Machine et al's Habiger nwc 5-18-10w, dr and test 2978 ft. Skiles et al's Campbell 1, se ne 28-19-9w, dr 715 ft. H. V. Holland et al's Borthers 1, sec 12-21-7w Congl. 3470 ft, 1st os 3473 ft., td 3476 ft., 2800 ft. oih pulled liner. Gerbrand-Pulse Oil & Drlg. Co.'s Wellman 1, swc 22-21-9w, sd 1185 ft.

PUMPING UNITS

For Crude Oil or Refined Liquids

SOUTHERN



Capacities from 50 to 500 barrels per hour. Pumps are either rotary or centrifugal. Motors are either gas, gasoline, Diesel or electric.

SOUTHERN ENGINE & PUMP COMPANY

HOUSTON, DALLAS, AND KILGORE, TEXAS

W. E. Witt et al's Fair 1, nw se se 4-22-8w, 8-inch, 2298 ft., sd 2423 ft.

ROOKS COUNTY—W. W. Kiskaddon et al's Ham 1, sw nw 25-7-19w, rig., Graham et al's Fike 1, swc 9-9-17w, td 3326 ft., pumped 39 oil 48 w 8 hrs., 37 gra. C. R. Craft et al's Ziegler 1, ne sw 8-10-16w, so 2858 ft, 2860 ft td, rust. J. H. Dester's Metheny 1, se ne 29-10-20w, fsg 3878 ft.

RUSH COUNTY—E. Wakefield et al's Zimmerman 1, se sw 7-16-18w, dr 1090 ft. Wakefield & Brouk's Kerbs 1, nw nw se 11-17-16w, mim., Westgate-Greenland Oil Co.'s Hagerman 1, nec 20-19-16w, dr 3040 ft.

RUSSELL COUNTY—H. C. Eisenhour et al's Krouse 1, se nw 18-13-12w, spd and sd. Empire & Texas Bozberger 1-B, nec 23-13-15w, 15-inch, 315 ft. Park's Opdycks 1, swc 20-14-13w, ru. Emrichs et al's Anderson 1, ne se sw 33-15-11w, rig. Shell Pet Corp.'s Batt 1, sec 35-15-14w, good satur. 3300 ft., rust. Cities Service et al's Eichman 1, c sw sw se 12-15-14w, br.

SEDGWICK COUNTY—Home Stake Roy's McCormick 1, sw nw 23-25-3w, Lansing 2630 ft., dr 2750 ft. Roxana Drlng. Co. et al's Woodman 1, sw nw sw 26-26-1w, sd 2469 ft. National Ref.'s Fee 1, se ne se 36-27-2e, br. I. W. Murfin et al's Martin 1, se nw 32-28-1e, mch. W. C. Talbott et al's Downs 1, se nw 32-28-2e, dr 1870 ft. Palmer Oil Corp.'s Royal 1, nec 15-28-1w, dr 1790 ft. Union O & R et al's Howell 1, swc 6-29-1e, sd 830 ft. E. B. Shawver's Furman 1, sw ne se 24-29-3w, Siliceous lime, hfw 4160 ft. Fullerton et al's Fee 1, ne ne se 35-28-1e, spd to 335 ft and sd.

STAFFORD COUNTY—Newman & Winemiller's Sittner 1, ne ne 33-21-12w, 1st so 3405 ft, flow 129 bo 1st hr., 170 bo 2nd, 94 bbl oil 3rd with 1.5m gas after acid, gra 33 at 86 deg. W. P. Faulkner's Schulz 1, se ne 6-22-13w, ru. W. P. Faulkner's Moses 1, nw sw 9-22-13w, ru. Stanolind et al's Hartnett 1, nw se 23-24-11w, cor and dr 3517 ft.

STEVENS COUNTY—Kuhn Bros., et al's Youngren 1, sw ne 1-32-39w, dr cem 2380 ft.

SUMNER COUNTY—W. M. McNab's Blair 1, swc 7-30-1e, ur 12-inch 1387 ft. Douglas & Gear's Strickler 1, sw nw ne 30-32-1w, Wilcox 4465 ft, dr 4480 ft. Graham et al's Dawson 1, nwc 4-33-2w, 4255 ft., temp abd.

TREGO COUNTY—Phillips Pet. Co.'s Trego 1, cne nw 14-12-23w, sso 3706-08, td 3718 rust., Central Commercial Oil Co.'s Locker 1, csw 12-14-22w, mim., F. L. Thorn et al's Koeppen 1, se sw 31-14-24w, ur 7-inch, 3973 ft.

WOODSON COUNTY—Ward McGinnis et al's Smith & Jobes 1, nw se 10-24-15e, td 1633 ft, gso, woc., Morris et al's Koenig 1, se nw 33-24-15e, hfw Miss. lime 1458 ft., sdo. Lilly et al's Wall 1, sw se se 25-25-13e, 1475 ft. D&A. Becker Bros. et al's Bonner cel nw sw 1560 ft D&A. Fred Rapp's Hougland 1, nw se 2-25-15e, sd 1400 ft. Becker Bros.' Venn 1, near cnw nw sw se 22-25s-14e, mim.

SOUTH LOUISIANA

ACADIA PARISH—W. C. Daniel's Setting 1, Trilby prospect, 17-9s-1w, sd 4029 ft. Humble's Federal Land Bank 1, North Crowley prospect, 34-8s-1e, fsg 9339 ft; Zoe S. A. Tarver 1, South Crowley prospect, lcn in 35-10s-1e. J. G. Markley's Ed Daigle Farms Co. 1, Churchpoint prospect, 19-7s-2e, set 10¾ in csg at 1502 ft, dr sw & sh at 2318 ft.

CALCASIEU PARISH—D & D Oil Co.'s Lutcher Moore 1, nw of Starks, 1-8s-13w, dr hard lime 6641 ft. Stanolind's Prairie Land & Canal Co. 1, South Lake Charles prospect, 10-11s-9w, abn at 9120 ft.

CAMERON PARISH—Humble's Miami Corporation 1, Prema area, 8-14s-5w, dredging canal Pure's State Mallard Bay 2, Mallard Bay prospect, 14-13s-3w, dr 7501 ft, hd brit. sh. Superior's State 1, in Gulf of Mexico, 4-15s-8w, capping piling.

EAST BATON ROUGE PARISH—Cavalier's Elliott 1, n of Hope Villa, 3-8s-2e, sd 6147 ft.

EVANGLINE PARISH—Continental's Tate 1, 44-3s-2e, dr sh 8819 ft.

IBERIA PARISH — Jefferson Lake's Lake Peigneur 414, 12s-5e, swbg 7071 ft. Texas Co.'s State Vermilion Bay 2-B, Vermilion Bay prospect, 16s-5e, mim.

JEFFERSON DAVIS PARISH—Stanolind's Calcasieu National Bank B-2, China prospect, 28-7s-2w, dst at 9851, 3 min, 125 ft dist and mud. Union Sulphur's T. R. S. Farms 1, South Roanoke area, 23-10s-4w, pref to dst 9136-40 ft, td 9151 ft.

LAFOURCHE PARISH—Amerada & Louisiana Land's South Coast Corp. 1, Raceland area, 34-15s-18e, ru. Gulf's State PP 3, sw of Marchland prospect, 36-23s-21e, dst, seat at 6749, ¼ chk, 1000 ft oil and 420 mud, 6 min, 32 grav, W. Helis, City of N. O. 2, Bay Marchland prospect, 19-23s-23e, lcn.

LIVINGSTON PARISH—Neville & Grubbs' Evans 1, Mallet Bluff area, 47-7s-3e, fsg at 7656 ft.

PLAQUEMINES PARISH—Gulf's State QQ 3, Quarantine Bay, 17-19s-17e, dr sn 1550 ft, was losing returns at 923 ft.

ST. BERNARD PARISH—Southern Sulphur Co.'s State 2, in Lake Borgne, 38-14s-15e, woc sg 3448 ft.

ST. MARTIN PARISH—Texas Co.'s St. Martin Land Co. 10, Henderson prospect, 15-8s-7e, dr sn & sh 3880 ft.

ST. MARY PARISH — Texas Co.'s State Bateman Bay 1, s of Morgan City, 21-16s-12e, 10,541 shale, prep to dr plg.

VERMILION PARISH—Continental's Brookshire 1, Abbeville area, 66-12s-3e, set 7⅝ csg 11,342 ft, worlds record.

TERREBONNE PARISH — Barnsdall's Dibert-Stark-Brown 1, n of Gibson field, driving piling.

NORTH LOUISIANA

BIENVILLE PARISH—De Soto O&G Co.'s Wm. Ashley 2, sw se 15-16n-10w, 7-in csg 5475 ft, perf 3 times 5130-80 ft, est 5 mil ft gas, acidizing, td 5650 ft. Hunt & Seaboard's Commercial Bank 1, ne nw 3-16n-6w, dr 5097 ft, broken anhydrite. Lide, Greer et al's Davis Lbr. Co. 2, w½ w½ 12-16n-5w, dry and abn, td 7355 ft. McDowell et al's Locke 1, ne c 9-15n-10w, sd 2921 ft.

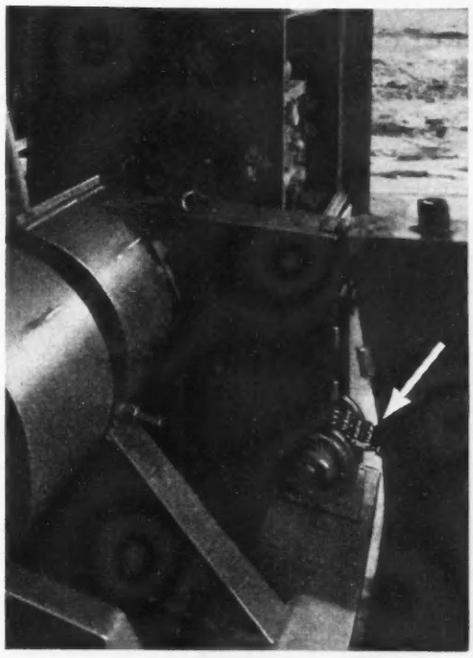
BOSSIER PARISH—Triangle Drlg. Co.'s Schuler Est. A-1, 13-17n-12w,.

CADDO PARISH—W. J. Hunter et al's N. B. Stoer 1, 10-15n-15w, tested gas and sw 5100-20 ft, pulling tub to test again, old td 6562 ft. Prairie River Synd.'s Hutchinson 1, 15-15n-12w, elev 153 ft, top lower Marine 8380 ft, claim so in sand 8700 ft, coring 8735 ft shale. Fallon Oil Co.'s Cupples 1, 24-16n-13w, cutting out tub to perf csg 4800-4818 ft, old td 5675 ft.

CLAIBORNE PARISH—J. R. Bevill et al's Alex Edmonds 1, ne ne 16-20n-5w, elev 160 ft, porous lime, so 5398-5413 ft, acidized several times, flowed and swabbed 30.8 gravity oil, pulling tub, arr standardize, td 5413 ft. W. L. McClanahan et al's J. T. Lewis 1, sw se 25-20n-7w, rur. J. B. Bond's Burgess 1, 3-20n-5w, rur to acidize at 5300 ft, old td 5800 ft. United Gas P. S. Co.'s Brownfield et al 2, c sw se 5-19n-5w, woc 7-in csg, td 5730 ft. Stevenson 1, se sw se 6-19n-5w, owdd, td 4350 ft. Lyons & Neely's Sims 1, 32-20n-5w, rur.

DE SOTO PARISH—A. D. Robinson's Allison 1, 17-14n-13w, dry abn, td 3002 ft. Clear Lake Oil Co.'s J. A. Woolums 1, 29-12n-12w, sd 600 ft. Skelly Oil Co. et al's Cook Land Co. 1,

Dependable Slush Pump Drives



Over 90,000 Feet of Hole

The Shaffer Portable Rotary has completed 28 Kansas wells, over 90,000 feet of hole, without a single shutdown for repairs. In the illustration a small section of the Diamond Multiple Roller Chain driving the slush pump is shown. The photograph was taken after the 25th hole was completed, but since then 3 more have been added, still with the same original Diamond Roller Chain Drive—over 200,000 miles of chain mileage.

Trade Mark

Look for the Diamond on the Links

Such continuous uninterrupted operation is good evidence of chain power—the endurance, dependability, and efficiency of Diamond Roller Chain.

Diamond Chain & Mfg. Co.

485 KENTUCKY AVENUE, INDIANAPOLIS, INDIANA

TULSA, OKLAHOMA: 227 E. 29TH STREET

DIAMOND

ROLLER CHAINS

dry abn, td 3512 ft. Pullman Oil Co.'s Ramsey 3, 36-11n-11w, testing, td 2942 ft. Gamble et al's Bushkin 1, 11-10n-11w, rur.

FRANKLIN PARISH—Jenson et al's Grayson 1, c ne 36-12n-6e, arr pb and perf at 1735 ft, old td 2516 ft. Tensas Delta Oil Corp.'s Woodland 1, sw se ne 22-11n-11e, spd woc 500 ft.

LINCOLN PARISH—G. E. Burford et al's P. N. Hanna 1, w½ se 34-18n-4w, elev 269 ft, top Blossom 2449 ft, sd 3625 ft high water. T. L. James & Co.'s Spencer 1, ne 11-17n-4w, elev 365 ft, cored show sw 5333-54 ft, basal Glen Rose, dr 5577 ft shale and lime. Ludel Oil Co.'s Gill 1, 36-20n-2w, dr 2600 ft. E. H. Moore's Commercial Bank-Williams 1, nw¼ nw¼ 22-18n-5w, rur. Gigantic Oil Co.'s (formerly E. T. Oakes et al's) R. L. Sanderson 1, 30-18n-1w, elev 151 ft, dk and mir.

MOREHOUSE PARISH—Rondeau et al's Clarke 1, 10-20n-7e, owdd, td 3755 ft.

NATCHITOCHES PARISH—Roy Raines et al's Allen 1, 22-9n-10w, sd 220 ft.

RED RIVER PARISH—Whitehurst et al's LeLong 1, 25-12n-11w, woc 13⅜ csg 250 ft. W. J. Hunter's Long Bell Lbr. Co. 2, 20-13n-19w, dr 3100 ft.

SABINE PARISH—Deep Rock Oil Co. et al's Whitney Corp. 1, 8-9n-13w, pb to 5370 ft, tested sw, pb & perf 2855-3005 ft, tested sg and sw, arr abn, old td 8510 ft. E. Howard's Sabine Lbr. Co. 1, ne nw 24-9n-12w, rur. Romine et al's La. Long Leaf Lbr. Co. 1, sw sw 7-5n-12w, rur. Ellis Prod. Co.'s Martin 1, 8-6n-12w, dr 2650 ft.

TENSAS PARISH—Sherrouse & Snyder's Chicago Mill & Lbr. Co. 1, 30-12n-10e, arr abn and move to new lcn, td 798 ft.

WEBSTER PARISH—Magnolia's Aarnes-Cox 4, ne nw 22-21n-10w, dr 2940 ft. A. J. McCook 2, sw sw 22-21n-10w, set 7-in csg 8263 ft, woc, td 8293 ft. J. M. Mixon 2, 22-21n-10w, lcn abn, will not drill due to 80-ac spacing rule. Ohio's Bodcaw Acc. 2, 47, c sw se 15-21n-10w, elev 200 ft, dr 7050 ft. S. P. D. Coyle & W. Cox 1, c sw se 23-21n-10w, elev 211 ft, dr 5279 ft. Thos. Crichton Acc. 2, 1, c se ne 21-21n-10w, elev 217 ft, dr 7220 ft. R. L. Holloway B-7, c sw ne 23-21n-10w, elev 196 ft, dr 7095 ft. Merritt 1, c sw sw 14-21n-10w, dr 4460 ft. A. G. Oliphant et al's Sam Banks 1, 34-21n-10w, elev 196 ft. 9⅝ in csg 5807 ft, dr 6110 ft. Standard Oil Co. of La.'s Davis 7, c ne nw 23-21n-10w, dr 3995 ft. Mrs. M. E. Gray 2, ne nw 26-21n-10w, dr 4107 ft. Standard Oil Co. of La. et al's E. L. Stewart 1, c se se 32-21n-10w, elev 240 ft, top Bodcaw 8589 ft, 7-in csg 8681 ft, perf csg swabbed, no show, arr perf csg and test again, td 8700 ft.

WINN PARISH—Georgetown Oil Co.'s Tremont Lbr. Co. 1, 19-10n-1e, sd 1600 ft. G. W. Zeigen's La. Central Lbr. Co. 11, sw nw 11-13n-1e, sd 1550 ft.

MICHIGAN

ALCONA—John Langloh's Kurrach 1, sec 10-27n-3e, co 1400 ft. Thalman & Morris' Kohlman 2, ne ne ne 10-26n-7e, rig.

ALLEGAN COUNTY—Champion Development Co.'s Detling 1, sec 35-2n-13w, dr 1400 ft; Siko 1, sec 9-1n-12w, lcn; Young 1, sec 26-1n-12w, dr 300 ft. Hubel Oil Co.'s Madalinski 1, sec 18-1n-13w, testing so 1382 ft in Traverse lime. John J. Arlen's Barnicle 1, sec 33-2n-14w, dr 210 ft.

ALPENA COUNTY—Lester Hemp's Potter 1, sec 36-32n-6e, dr 800 ft.

ARENAC COUNTY—Gordon Oil Co.'s State B1, sec 2-19n-3e, dr 2998 ft. Joseph Zuker's Reed 1, sec 10-19n-5e, dr 600 ft. Harvey Linabury's Smith 1, sec 17-19n-6e, dr 1910 ft.

BAY COUNTY—Wright & Keeler's Booth 1, sec 24-14n-6e, Dundee 2710 ft, dr 2719 ft. Victory Petroleum Co.'s Lokowski 1, sec 27-14n-3e, lcn.

CASS COUNTY—L. T. Barber's Beebe 1, sec 3-5s-15w, dr 1835 ft. Wayne Oil & Gas Co.'s Gebhard 1, sec 34-5s-15w, dr 690 ft.

CHEBOYGAN COUNTY — Bert Francis, Tr.'s Campbell 1, sec 7-34n-1w, sd 300 ft.

CLARE COUNTY—Pure Oil Co.'s Apel 1, sec 31-19n-5w, dr 3190 ft. McClanahan Oil Co.'s (formerly James Pierce) Mortenson 1, sec 9-18n-5w co 1665 ft. James Peirce's Presley 1, sec 32-17n-3w, dr 1100 ft.

CRAWFORD COUNTY—Dome Oil Co.'s Lindgren 1, sec 33-25n-3w, rig.

EMMET COUNTY — Cheboygan Oil Co.'s McPhee 1, sec 15-35n-4w, dr 440 ft.

GLADWIN COUNTY—Mammoth Producing & Ref.'s Nunn 1, sec 18-17n-2w, dr 400 ft. Dibble Brothers' Delbridge 1, sec 1-17n-2e, dr 1000 ft. H. J. Hand's Smart 1, sec 29-17n-2e, Dundee 3401 ft, so 3478 ft, sd to test. D. E. Huge's C x 1, sec 12-19n-2w, dr 400 ft. C. B. McLaughlin's Simmons 1, sec 28-19n-2w, sd 260 ft. Dapar Oil Co.'s Villeneuve 1, sec 11-20n-2w, dr 1510 ft.

GRATIOT COUNTY — Sam Siegel, Tr.'s Kerr 1, sec 36-10n-1w, sd 2250 ft.

IOSCO COUNTY—Pabst Pet. Co.'s Monfort 1, sec 8-22n-6e, re 3360 ft.

ISABELLA COUNTY—C. E. Weeller's Cotter 1, sec 11-15n-5w, dr 1150 ft. Boston Oil Co.'s Fox 1, sec 23-15n-5w, dr 1100 ft. James Peirce's Herman 1, sec 4-16n-3w, dr 110 ft.

MECOSTA COUNTY—McHardy Syndicate's Gingrich 1, sec 12-15n-7w, so 3860 ft, Monroe lime, water 3867 ft, sd.

MIDLAND COUNTY—Sun Oil Co.'s Consumers Power 1, sec 8-16n-1w, dr 3210 ft. T. F. Caldwell, Inc.'s Kreigel 1, sec 36-15n-1w, Dundee 3740 ft, sd 3855 ft.

OTSEGO COUNTY—D. Geraldine's Fee 1, sec 34-30n-3w, lcn. Harley Williams' Raae 1, sec 15-30n-1w, fsg 2480 ft. Barton & William's Yuill 1, sec 9-32n-3w, dr 360 ft.

SAGINAW COUNTY — Mid-West Pet.'s Spurbek 1, sec 6-11n-2e, dr 2300 ft. Doarn & Hillard's Dobs 1, sec 33-11n-1e, sd 1010 ft.

MISCELLANEOUS COUNTIES: Mackinaw —C. Van Kuren's Hiawatha 2, sec 5-44n-9w, lcn. Missauke—Rex Oil Co.'s Meekoff 1, sec 30-21n-6w, dr 3666 ft. Newaygo—Muskegon Dev.'s Carlson 1, sec 9-16n-12w, fsg 3155 ft. Osceola—Osceola Oil Co.'s Gregg 1, sec 22-18n-7w, lcn. Oscoda—Burr Oil Co.'s Smith 1, sec 36-27n-2e, lcn. Roscommon—Seger & Swan's Barnett 1, sec 36-21n-1w, dr 1900 ft. Sanilac—T. H. Ferguson's Obee 1, sec 17-14n-14e, sd 550 ft. Tuscola—C. W. Spaulding's Dalrymple 1, sec 35-10n-7e, dr 2250 ft.

MISSISSIPPI

BOLIVAR COUNTY—Phillips Pet. Co.'s Perthshire 1, 2-24n-7w, dr 5668 ft, hd Paleozoic rock.

CALHOUN COUNTY—B. G. Dowell's H. D. Hughes 1, 18-23n-9e, dr 697 ft. Ed Spencer's J. C. Conner 1, se ne 12-24n-8e, lcn.

CLAIBORNE COUNTY — Claiborne O&G Drlg. Co.'s Crawford 1, 6-13n-4e, sd 2210 ft, repr rig.

KEMPER COUNTY—R. A. Keaton et al's Buckwalter Lbr. Co. 1, nec 6-10n-14e, dk.

LAMAR COUNTY—Sun Oil Co. et al's Mrs. Kate Talley 3, 1600 ft, s & 1350 ft e nwc 33-4n-15w, elev 388 ft, topped salt dome 6205 ft, arr skid over for new hole.

MADISON COUNTY—Sun Oil Co. et al's J. E. Wilson 1, se se 1-8n-2w, elev 218 ft, tested sw at base chalk, sw abn td 5035 ft.

PIKE COUNTY — Acadian Prod. Corp.'s Bales 1, c se nw 24-7n-2e, dk.

SUNFLOWER COUNTY — Phillips Pet. Co.'s Dockery 1, sw ne 27-22n-4w, rur.

WILKINSON COUNTY—Chas. Green et al's Julian Taylor 1, 4-3n-1e, elev 251 ft, dr 1510 ft. H. L. Carnahan et al's Foster Creek 1, sw nw 1-2n-2w, top Cockfield 4113 ft, logged sw sand 4204-19 ft, dr 4595 ft.

MONTANA

DANIELS COUNTY—Whitetail Dome Oil Syndicate's Wiley 2, nw ne nw 10-36n-50e, dr 1160 ft.

GLACIER COUNTY—W. E. Ullman's Allotted 1, csw 36-36n-8w, set 82 ft 15½ in csg, td 1200 ft.

JUDITH BASIN COUNTY — Fletcher E. Hunt's Hobson 1, nw se ne 21-17n-24e, running csg and will try for water so, td 1700 ft.

PARK COUNTY—Ben W. Ryan's Burgess 1, se sw nw 28-2s-11e, making hole at 825 ft.

PETROLEUM COUNTY—O. B. Canfield's 1, e se ne 21-17n-24e, fsg with td at 750 ft.

PONDERA COUNTY—Kirk Oil Co.'s Kellog 1, se nw nw 31-28n-4w, sd 2296 ft.

TOOLE COUNTY—Model Oils Ltd.'s Fey 1, cne sw 5-37n-3e, dr 1610 ft.

YELLOWSTONE COUNTY — R. C. Tarrant's E. A. Heare 1, cwl ne nw 14-6s-19e, dr 830 ft. Broadview Dome Oil Co.'s Halbrieter-Stoltenberg 1, ne ne sw 18-3n-23e, dr 2000 ft.

OKLAHOMA

ADAIR COUNTY — B. L. Maddox's Penn Mutual Life Ins. 1, cs½ ne nw 5-16n-24e, dr 260 ft.

ATOKA COUNTY—A. L. Larson's Mason 1, sw se se 35-1n-14e, dr 140 ft. C. M. Sheldon & Gardner Pet. Co.'s Lee 1, ne nw sw 2-4s-10e, ru mach.

BECKHAM COUNTY—Bud Lewis' Dougler 1-A, se ne 21-8-26w, dr 2180 ft. Mid-American Oil Co.'s Biscoe 1-A, swc 28-8-22w, co at 2200 ft, wih.

BRYAN COUNTY—Southern Oil Co.'s Henry 1, cnw ne 10-8s-7e, loc.

CADDO COUNTY—Clyde Becker et al's Pharr's 1, se se nw 24-6n-4w, 6235 ft sd for w. I. T. I. O.'s Dome-Bo 1, c ne se 29-6n-10w, rig.

CLEVELAND COUNTY — Harper-Turner's Pollock 1, cw½ nw nw 13-9n-2w, loc. H. R. Hollenbach's Norman 1, nw nw ne 17-9n-2w, dr 5959 ft after pb from 7018 ft; H. R. Hollenbach's Ward 1, sw se ne 30-7n-1e, dr 4920 ft.

CHOCTAW COUNTY—V. K. Chapman & T. N. Low's Hallum 1, nw nw ne 4-7s-20e, spd and sd

COAL COUNTY—Phillips Petroleum Co.'s Beck 1, se sw sw 6-1n-9e, dr 1390 ft. Carter Oil Co.'s Claytor 1, c w½ ne sw 27-2n-9e, sg and dr 4677 ft.

COMANCHE COUNTY—J. W. Wolf's Costinus 1, sw sw se 30-4n-11w, spd. Frank Scott's Kuntz 1-A, se ne se 27-4n-11w, lost bit and sd. M. J. Andrichak's Korthouse 1, nw ne sw dr 834 ft.

COTTON COUNTY—Bowers and Wise's Pendergraft 1, nw se sw 4-4s-12w, rig.

CREEK COUNTY—M. W. Mosier et al's Holcomb 1, se sw ne 19-18n-8e, dr plg, td 3009 ft. L. B. Jackson's Alberty 1, ne ne nw 25-18-9e, ur 8-in csg at td 2420 ft.

GARVIN COUNTY—Carter Oil Co.'s Potts 1, c e½ se nw 36-1n-3w, pb and fsg slips 1395 ft. B. C. D. Edward's Clark 1, nec 16-3n-3e, dr 1352 ft.

GRADY COUNTY—Gulf Oil Corp.'s Thomas 1, sw nw nw 14-4n-5w, repr pumps, td 6414 ft. Doyle Pet. Co.'s Huffine 1, nw nw se 30-5n-8w, rig.

GRANT COUNTY—Carter Oil Co.'s Crisman 1, cw½ sw nw 16-25n-3w, test.

GREER COUNTY — J. I. Medlin et al's Broudie 1, nwc 5-6n-20w, ru and sd.

HASKELL COUNTY—Continental Oil Co.'s Ferguson 1, sw se ne 33-8n-20e, dr 6079 ft.

HUGHES COUNTY—Carter Oil Co. et al's Hamilton 1, c w½ ne sw 33-4n-9e, swab and test o&w. Phillips Petroleum Co.'s Becker 1, ne nw sw 8-5n-10e, rur. H. H. Ellis' Tiger 1, nw se sw 29-6n-8e, sd 550 ft. W. O. Allen et al's Barnard 1, swc 24-8n-8e, td 4270 ft, pb 3423 ft, 7 inch 3384 ft, 2800 ft fluid, recem. The Texas Co.'s Cox 1, ne nw nw 23-9n-8e, dr 4305 ft. Moroney & Healey's Gield 1, cnw sw 11-9-11e, sg and sd 3413 ft.

JEFFERSON COUNTY—Massad & Swainsberger's Barrett 1, ne se se 14-6s-6w, sd 1842 ft.

JACKSON COUNTY—Ace Gutowsky et al's Booker 1, nw nw nw 33-2n-18w, so, td 582 ft, sd. Ace Gutowsky et al's Lee 1, nw nw se 36-2n-19w, loc. W. W. Gutowsky's Howard 1, ne sw nw 10-3n-19w, sd 950 ft, tools in hole.

JOHNSTON COUNTY—Patton et al's McCrummers 1, sw sw ne 16-1s-6e, sd 1165 ft. W. T. Shelton's Chapman 1, c nw nw 26-4s-6e, dr 520 ft.

KAY COUNTY—Fortuna Oil Co.'s Harris 1, sw sw ne 14-25n-1e, 383 ft sd.

KIOWA COUNTY—E. L. Lippert's Miller 1-A, nwc 14-2n-18w, ur 8 inch at 200 ft. Kiowa Oil Co.'s Finder 1, c sw ne 4-6n-20w, td 1050 ft, so, tools moved and sd. Hughes & Reese, Fultz 1, sec 10-6n-18w, sd for 10 inch csg.

LATIMER COUNTY—Clark Drilling Co.'s Wilson 1, c se se 15-5-18e, pb and to test at 2700 ft.

LINCOLN COUNTY—Continental Oil Co.'s Community 1, nw nw se 7-15-5e, bldg rig. Cimarron Oil Corp. and Harper-Turner's Orner 1, c sw se 31-17-2e, 5009 ft, D&A.

LOGAN COUNTY—Shell Pet. Corp.'s Wad-

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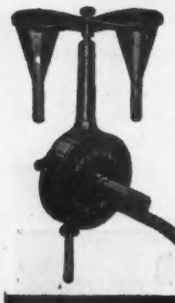

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dle 1, sw se nw 36-15-4w, dr 6655 ft. Anthony & Marshall's Fruin-Eckman 1, se se sw 4-16n-1e, so&g 4975 ft and sd. Sunray & Olson's Canning 1, sw sw ne 31-17n-1w, dr 1360 ft. Freeland et al's Woods 1, 28-17n-1e, lcn abd.

MAJOR COUNTY—Ed. V. Parson's Patzkowsky 1, c nw¼ 10-20n-11w, rig.

MARSHALL COUNTY—Paul Robb et al's Vittitoe 1, c ne se 11-5s-4e, td 5461 ft but sd after co to 720 ft.

MURRAY COUNTY—Power Oil Co.'s Lancaster Trust 1, c sw ne 10-2s-2e, sdtr 3165 ft. O. O. Owens' Gryer 1, ne se ne 34-1s-3e, 2574 ft td, 1400 ft wih, sd. Meyer & Greenup's Arbuckle Royalty Co. 1, nw nw ne 18-2s-3e, spd 48 ft, sd.

MUSKOGEE COUNTY—F. E. Cusack's Elliott 1, cnl nw sw 20-15-20e, rog. F. E. Cusack's Fee 1, ne sw se 20-15n-20e, spd 65 ft.

NOBLE COUNTY—Seaboard Western Oil Co.'s Guthrie 1, nw nw ne 6-20n-2w, rig. Herndon Drilling and Atlantic's Baggett 1, se se se 13-21n-3e, dr 4044 ft.

OKFUSKEE COUNTY—Burke-Greis's Rhea 1, sw se 14-10-9e, fsg bailer 1780 ft. F. W. Merrick's Mackey 1, ne ne sw 29-11-10e, 2045 ft td.

OSAGE COUNTY—National Refining Co.'s Page 2, nw sw se 28-22n-9e, lcn.

OKLAHOMA COUNTY—Frank Buttram et al's Cole 1, nwc 16-14-1e dr 4330 ft.

PAYNE COUNTY—H. S. Brim et al's McKenzie 1, cwl se ne ne 13-18-3e, pits.

PITTSBURG COUNTY — Okla. Dist. Oil Co.'s Beeler 1, ne ne sw 7-7-14e, temp abd after bridge.

PONTOTOC COUNTY—Caloma Oil Corp.'s Brentz 1, se ne sw 4-1n-6e, td 1010 ft, temp abd. Norbla Oil Co.'s McBride 1, ne ne sw 10-2n-5e, dr 300 ft. C. W. Roodhouse et al's Booth 1, se nw se 20-2n-6e, flow abt average of 44 bbls last 2 weeks. Union Dev. Co.'s Abbott 1, sw nw ne 34-3n-6e, drill pipe stuck 2500 ft. Kerlyn Oil Co.'s Pratt 1, sw se ne 6-4n-4e, rur. Boettcher O&G Co.'s Gann 1-A, se nw ne 25-4n-7e, fsg drill pipe 4347 ft.

POTTAWATOMIE COUNTY — Richborn Oil Co.'s Fidler 1, nec 9-5n-5e, ru and sd. Hightower's Baker 1, se se nw 27-6n-3e, rig. Roy S. Nash et al's Miller 1, cn½ ne se 29-6n-3e, sg&o and fsg 4088 ft in Viola. British American Oil Co.'s Ramsey 1, se ne 27-6n-4e, 3819 ft, woc. Mid-Continent et al's Ne-Tah-Pea-Se 1, se se ne 24-11n-4e, swb abt 175 bbls daily 4 days. Atlantic Refining Co.'s Dooley 1, se se sw 9-11n-5e, recement 4689 ft.

PUSHMATAHA COUNTY—Erle Halliburton et al's Gabwell 1, sw ne ne 30-2s-15e, dr 4344 ft.

SEMINOLE COUNTY — Stanolind-Amerada & Mid-Continent's Salina 1, se ne nw 4-5-6e, sso&sg, rust 3317 ft, dolomite. Gillespie & Moore's Gaines 1, ne sw sw 20-6n-7e, 2717 ft, woc. J. F. Root's Cone 1, nw ne sw 11-7n-5e, pits. E. W. Jones et al's Belford 1, ne se ne 9-9-8e, dr 3321 ft. Atlantic & Gulf's Decker 1, swc 32-11n-6e, sso&g, dr 4575 ft.

STEPHENS COUNTY — Coline Oil Co.'s Johnson 1, sw se ne 1-2n-8w, dr 8785 ft. Ed Parson et al's Blake 1, c sw nw 22-2n-8w, test 4947-4966 ft. Chas. Newsom's Pfile 1, sw sw sw 1-2s-7w, sd 115 ft. Jack Cohen's Pierce 1, ne ne nw 24-2s-6w, dr 1050 ft in shale. Carter Oil Co. et al's Harley 1, c ne ne 24-2s-4w, testing 7475 ft.

TILLMAN COUNTY—I. T. I. O.'s Graham 1, se se ne 1-3s-19w, test 3081 ft, Canyon lime. Gulf Oil Corp.'s Prichard 1, se nw se 32-3s-16w, dr 780 ft. Tom Walker's Bowman 1, sw sw nw 10-4s-17w, dr red beds 200 ft. Caven et al's Southerland 1, sw sw nw 35-4s-16w, ru and sd.

WASHITA COUNTY—L. B. McWhirter's Fee 1, nw sw sw 34-8-19w, sd 1810 ft. John Koberg's Harms 1, nw nw ne 6-10-16w, dr 4260 ft in lime.

WEST TEXAS

(This report is confined to Ordovician, Delaware and prospects west of the Pecos River).

BREWSTER COUNTY—Floyd C. Dodson, Duffy et al's Texas American Synd. 1-A, near c ne ne GH&SA Ry. sec 66, blk 10, elev 4228 ft, top Delaware shale 2297 ft, show o&g through water, td 6001 ft, may deepen. Tony Hess et al's Mrs. M. Decia 1, sec 7, blk 1, Georgetown Ry. Co. sur, sd 925 ft. G. H. Storey et al's J. P. Wilson 1, c se nw T. & St. L. Ry. sec 3, blk 212, elev 3609 ft, trace oil 2358-65 ft, 2475-85 ft and 2520-35 ft, sd for repairs 2545 ft.

CRANE COUNTY—Gulf Oil Corp.'s W. N. Waddell et al 6, ne ne se PSL sec 4, blk B-27, mim and sd; M. B. McKnight 2, c ne PSL sec 9, bllk B-21, elev 2687 ft, top anhydrite 416 ft, top salt 585 ft, pb fr 5404 to 3395 ft, acct crooked hole. Loffland Bros. Co.s J. B. Tubb-Gulf 3, nw nw nw PSL sec 9, blk B-27, elev 2540 ft, top Simpson 5791 ft, top Ellenberger 5802 ft, td 5891 ft, bailing sul water with scum oil. Sinclair Prairie et al's J. B. Tubb 2, nw nw sw PSL sec 3, blk B-27, elev 2552 ft, top Yates 1460 ft, top lime 2310 ft, top Simpson 5842 ft, show o&g, coring Simpson 6097 ft. Wilcox O&G Co. et al's M. B. McKnight 1, c se nw G&MMB&A sec 9, blk 46, elev 2773 ft, dr 1600 ft.

CROCKETT COUNTY—Moore Bros. Corp. et al's Paul Perner 1, c nw I&GN Ry. sec 37, blk 2, elev 2560 ft, dr 430 ft. Superior Oil Co. (Cal.) et al's Massie 1, c se ne GC&SF Ry. sec 55, blk UV, elev 2537 ft, top Simpson 7171 ft, top Ellenberger 7424 ft, td 7948 ft, pb to 1370 ft, cem 7-in cas 1230 ft to test shallow pay.

EL PASO COUNTY—Tri-State Oil Co.'s Chas. & L. M. Kinkel 1, ne ne ne sec 237, S. F. No. 7232, dr 2980 ft.

HUDSPETH COUNTY — Haymon Krupp Oil & Land Co.'s K. S. Briggs 2, nw nw nw T&P Ry. sec 24, blk 73, Tsp. 7, rust; S. J. Thaxton 1, near SEc ne se T&P Ry. sec 34, blk 74, Tsp. 6, dr by lugs, td 3076 ft.

LOVING COUNTY—Barnett Pet. Corp.'s W. D. Johnson 1-A, se se ne T&P Ry. sec 12, blk 56, Tsp. 1, elev 3044 ft, dr 1280 ft; W. D. Johnson 1-B, ne se se T&P Ry. sec 2, blk 57, Tsp. 1, cem sur cas. Continental Oil Co.'s E. C. Marrs-Y, Bell 1, near SEc nw T&P Ry. sec 20, blk 54, Tsp. 2, cem 13-in cas 400 ft. Michigan O&G Corp.'s M. Kyle 4, se nw ne T&P Ry. sec 20, blk 55, Tsp. 1, dr 2150 ft; M. Kyle 5, ne ne se sec 20, lcn. Stanolind's M. Kyle 2, ne ne sw sec 20, tested little o&g with water in Delaware, td 4124 ft, dry and abd. Woodley Pet. Co.'s T. P. Land Trust 1, nwc n½ s½ of T&P Ry. sec 21, blk 55, Tsp. 1, fsh 3461 ft.

PECOS COUNTY — Aero Gas Ref. Co.'s Johnson-Skelly 1-A, n½ of H&GN Ry. sec 40, blk 8, sd 522 ft. F. A. Bond et al's O. W. Williams 1, near c sw se of GC&SF Ry. sec 3, blk 114, sd 210 ft. E. P. Cravens et al's J. C. Trees 1, ne nw se H&GN Ry. sec 63, blk 8, sd 2176 ft. Mike L. Benedum et al's Joe C. Trees 1, sw sw sw H&GN Ry. sec 9, blk 8, Ordovician test, rur. D. W. Francis et al's Hadden-Westerman 1-A, nwc 186-ac lse, Rubian Phares sur, blk 166, elev 3155 ft, dr 840 ft. Humble O&R Co.'s F. N. Belding 1, ne se sec 99, blk OW, cem sur cas. K. Kimberlin & Samwan Oil Co.'s Mrs. B. Young-Humble 1, sec 49, blk 10, H&GN Ry. sur, dr 1630 ft. Magnolia Pet. Co.-Superior Oil Corp.'s J. H. McKee 1-A, near nw nw sw H&GN Ry. sec 24, blk 9, Ordovician test, elev 2385 ft, td 1102 ft, lowering cas. H. B. Nolan et al's Blackstone-Slaughter 1, se se se T. & St. L. Ry. sec 25, blk 130, sd 1075 ft. Phillips Pet. Co.'s Pryor-C. H. Grierson 1, c ne se sec 71, blk OW, elev 2939 ft, top anhydrite 1810 ft, dr 2850 ft. T. N. Sloan-F. E. Lewis and Sloan-Zook Co.'s Dow Puckett 1, sw sw sw E. L. & RR Co. sec 3, blk 100, lcn. Stanley A. Thompson et al's Elsinore Cattle Co. 1, se¼ of GC&SF Ry. sec 53, blk D, elev 3938 ft, sd 5804 ft. Trans-Pecos Oil Co.'s F. M. Gallaher 1, ne ne nw T&P Ry. sec 9, blk 51, Tsp. 10, cem cas 1475 ft; Popham Land & Cattle Co. 1-B, s½ of GH&SA Ry. sec 235, blk 11 (3rd hole), dr 370 ft.

PRESIDIO COUNTY — Brite Production Co.'s L. C. Brite 1, ne¼ of GH&SA Ry. sec 113, blk 12, tested 2½ bbls oil daily at 4367-75 ft, lowering 7-in cas.

REEVES COUNTY—Barnett Pet. Corp.-J. C. Hill and Conoco's Ely-Healy 1, c nw PSL sec 38, blk 71, elev 3166 ft, fsh tools 1320 ft. Gen'l Crude Oil Co.'s T. P. Land Trust 1, c ne¼ T&P Ry. sec 15, blk 56, Tsp. 2, elev 2780 ft, top Delaware lime 3240 ft, top sand 3279 ft, shot 120 qts nitro 3250-94 ft, tested little oil with water, co to deepen.

SCHLEICHER COUNTY—John M. Cooper et al's Bert Page 2, c ne se GH&SA Ry. sec 40, blk L, elev 2289 ft, dr 4140 ft. Tex-Tor Oil Corp.'s Judkins-Spencer 1, c sw¼ of A&B sec 33, blk A, dr 2405 ft.

SUTTON COUNTY—Ordovician Oil Co.'s J. T. Evans 1, ne ne ne sec 1, blk V-26, Lucy Stubblefield sur, mim.

TERRELL COUNTY—R. A. Basurto et al, J. H. Phelps-Bates 1, near SEc nw¼ sec 5, G. W. Turley sur, A-4, elev 2185 ft, co junk, td 5600 ft. D. & S. Oil Co.'s Sam Bell 1, near swc ne sw of E. L. & RR. sec 68, blk D-7, dk.

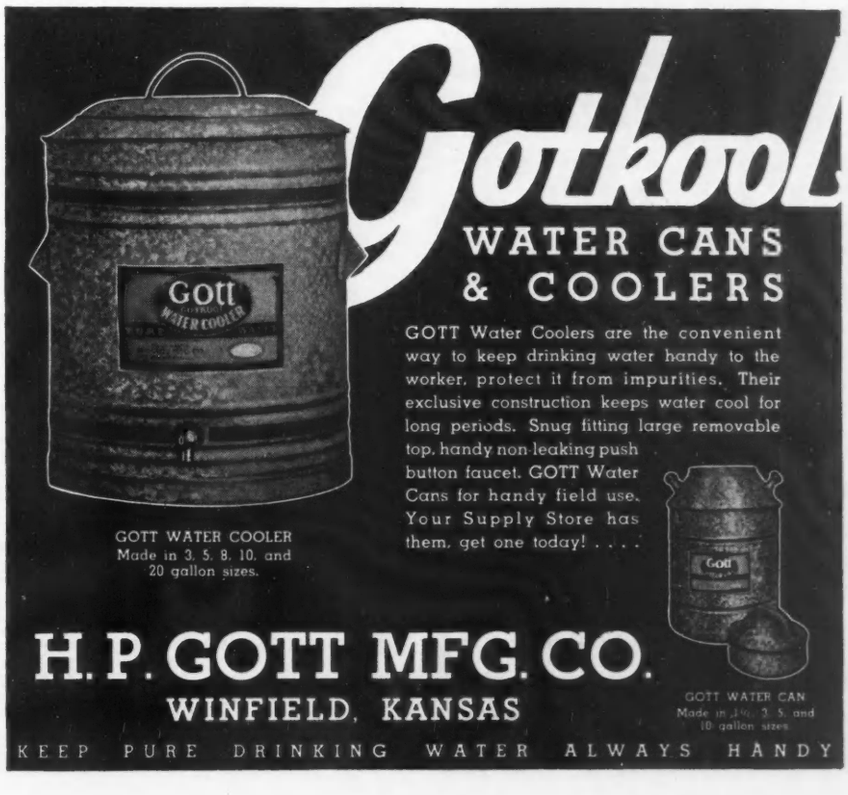
WARD COUNTY—Magnolia's Geo. Sealy 1-A (sec 55), ne ne se G&MMB&A Ry. sec 55, blk F, top lime 2865 ft, dr 2880 ft. Murjo Oil Corp.'s D. Monroe 1, c n¼ H&TC Ry. sec 210, blk 34, elev 2674 ft, top Delaware lime 4875 ft, top Delaware sand 4925 ft, show o&g, sd 5000 ft. McDowell & Weiner (was L. F. White et et al's) Monroe-Rector 1, e cor W&NW Ry. sec 3, blk 1, elev 2649 ft, top Delaware lime 4635 ft, top Delaware sand 4670 ft, td 4702 ft, shot 260 qts 4635-98 ft, flowed head of 105 bbls oil 3½ hrs with flow valves.

EAST TEXAS BORDER COUNTIES

HARRISON COUNTY—J. B. Bond's Bailey & Martin 1, Geo. Martin sur, c ev 290 ft, top Pecan Gap 1790 ft, dr 3850 ft, Georgetown lime. Highway 80 Oil Co. of Texas' Mable George 1, J. S. Powell sur, elev 279 ft, sd 2506 ft.

MARION COUNTY—Ark. La. Gas Co.'s J. P. Fant 1, L. P. Cadenhead sur, elev 336 ft, tested sw & oil 6183 ft, arr pb & perf to retest, old td 6188 ft. Emma Ford 1, A. de los Santos Coy sur, 7-in csg 6028 ft, swabbing td 6097 ft. Mid-Continent Pet., Sory 2, A. de los Santos Coy sur, elev 307 ft, top red beds 3812 ft, dr 3865 ft, Sory 3, A. de los Santos Coy sur, woc td 6054 ft. United's J. H. Hutchinson 2, A. de los Santos Coy sur, spd dr 976 ft. Hunter Co.'s Fonda 3, A. de los Santos Coy sur, top massive anhydrite 5651 ft, dr 5925 ft. Fohs Oil Co.'s Mary McReynolds 2, A. de los Santos Coy sur, top red beds 3725 ft, dr 3762 ft. Gulf's Lizzie Henderson 1, R. Bennington sur, top massive anhydrite 5594 ft, coring 5987 ft, shale & lime. Holcomb & Thomasson's Hilliard & Womack 1, R. Bennington sur, dr 5350 ft. Gray & Taylor 1, A. de los Santos Coy sur, lcn. Shell's Henderson 1, R. Bennington sur, woc 1976 ft.

PANOLA COUNTY—Danciger O&R Co.'s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HOUSTON, TEXAS

J. W. Tatum 1, Alfred Bissell sur, elev 193 ft, top anhydrite stringer 4110 ft, top massive anhydrite 5017 ft, dr 5100 ft. Magnolia Pet. Co.'s E. A. Hull 2, Thos. Applewhite sur, elev 222 ft, dr 7845 ft, hd white sand.

SHELBY COUNTY—Portex Oil Co.'s Pickering Lbr. Co. 3, A. Hanson sur, elev 213 ft, tested sg & sw 5090 ft, pb & perf 5044-56 ft, showed gas now sw, si for gauge. Allen et al's George 1, C. C. Tutt sur, 10-in csg 300 ft, sd 1250 ft. Logansport P. L. Co.'s Rushing 1, Mannon Smith sur, sd 3010 ft.

SOUTH TEXAS

SAN ANTONIO DISTRICT

BASTROP COUNTY—J. W. Bibb et al's O. B. Lentz 1, Freeman Wilkinson sur, 1¼ mi nw Red Rock, 24 ft, woc. Conservative Oil Co.'s Wentland-Bowen 1, Freeman Wilkinson sur, coring 2308 ft, Taylor. H. & H. Drilling Co.'s Earl C. Erhard 1, Hill's Prairie community, s of Bastrop, ru. Hantho-Nelson's K. M. Litton 1, Addison Litton sur, 2112 ft, drilling water wells at 300 ft. Marts & Beavans' Gillum 1, Thomas Garretson sur No. 19, 2550 ft, chalk 2350-2440 ft, serpentine 2440-50 ft, reaming. H. D. Noonan's J. D. Fitzwilliams 1, M. Rosseau sur, lcn. R. Olsen Oil Co.'s Mattie Murchison 1, Addison Litton sur, drilling at 1000 ft. Texas Northern Oil Corp.'s John Barton et al 1, J. Rogers sur No. 6, drilling 2910 ft.

BEXAR COUNTY—Edna May Oil Co.'s Mrs. C. N. Cassin 1, Fernando Rodriguez sur, 1349 ft, pumping 100 barrels per day water, 3 barrels oil. J. O. Williams et al's A. W. Bitter 2, Jose M. Baerrera sur No. 58, lcn start about 9/1/37.

CALDWELL COUNTY — Fred J. Adams' Mrs. Luna E. Shinn 1, Ambrose Tinney sur, dry and abnd at 2842 ft, top Austin chalk 2536 ft. B. C. Armstrong et al's Wilson Bell 1, Solomon Seal sur, dr chalk, slight oil show at 2465 ft, may set casing. R. T. Belcher's Mrs. G. Moody 1, Solomon Seal sur, shut down at 2130 ft. Lanning & Coffield's W. R. Trammell 1, Guadalupe College sur, spud and shut down. Padua Pet. Corp.'s W. J. Cooper 1, Solomon Seal sur, 2650 ft, wait on pump, 400 ft oil in hole. Spokane-Oklahoma O&G Co.'s E. H. Putnam 1, John Henry sur, spudder on lcn, sd.

DIMMITT COUNTY—Wilcox O&G Co.'s Light Ranch (Luminar) 2, sec 29, drilling 5425 ft; Light Ranch (Myssie) 3, drilling 960 ft.

EDWARDS COUNTY—Amon G. Carter et al's Frank J. Sweeton Ranch 1, GC&SF sur, drilling 4088 ft.

FRIO COUNTY—Amerada Pet. Co.'s Mrs. D. D. Harrigan 1, Salvador Flores sur, depth 6410 ft, swabbed 11 bbls in 5 hrs, pb td 5706 ft, tearing rig down. H. A. Pagenkopf & L. C. Jamieson's Houston Estate 1, Juan Figuerroa sur, moving in.

GUADALUPE COUNTY—Mason Altgelt's Herman Schubert 1, Exnaurizar sur, shut down for repairs at 1030 ft. Diamond Half Oil Co.'s E. Bibbs et al 2, Joel D. Robinson sur, twisted off drill stem, fishing at 2268 ft. Jas. H. Eddy's D. F. Smith Est. 1, W. H. Hunter sur, dry and abnd at 2624 ft, top chalk 2111 ft, top Ed lime 2454 ft, tested dry, no sul wtr. Felmont Oil Corp.'s W. O. K. Anderson 1, Green Dewitt sur No. 11, dry and abnd in chalk at 2452 ft. Josey Oil Corp. et al's J. Seeligmann, J. W. Williamson sur, derrick erected 8-18-37.

KENDALL COUNTY—J. E. Landon & D. F. Peffley's C. A. Sidensticker 1, A. Rodriguez sur, drilling 390 ft.

LEE COUNTY—James E. Pederson's C. A. Turner 1, David Hudson sur, shut down 6560 ft.

MAVERICK COUNTY — Wellington Oil Co.'s Chittim Ranch 1, I&GN sur, coring at 2210 ft.

MEDINA COUNTY—Kelfar Oil Co.'s Flora H. Briscoe 1, Aloys Schmidt sur No. 8, spudded. R. J. Taylor's R. J. Taylor 1-A, sur 135, 6 mi sw Hondo, lcn.

WILSON COUNTY — Pat Higgins' Mary Dickey 1, M. Rodriguez sur, drilling 1095 ft. R. C. Stanley's E. M. Hierholzer 2, R. Salina sur, temp abnd at 1031½ ft.

LAREDO DISTRICT

DUVAL COUNTY—V. L. Blanchard's Rosa V. de Puig 1, Sweden Farm Lots sub, depth 4886 ft, coring shale, top Jackson 4005 ft, ran Schlumberger at 4860 ft, dry in Gravis sand. H. & H. Drilling Co.'s J. F. Welder 1-A, Samuel Alexander sur, will sp abt 8-27-37. Humble O&R Co.'s Mary L. Davidson 1, sec 218, coring 2872 ft. Magnolia Pet. Co.'s DCRC 1, sur 259, set sur casing; DCRC 5, J. Poitevent sur, drilling 1955 ft. Penn-Palangana Oil Co.'s C. K. Gravis 1, sec 254, drilling 6165 ft, may be in Cook Mountain. Standard Oil Co. of Kansas' Southland Life Ins. Co. 1, Ball Ranch subd, Agua Poquita gr, coring 4732 ft. Standard Oil Co. of Texas' Gruy Estate, sec 154, mim. G. Stratton & Baltimore's W. F. Afflerbach 1, center of sur 342, swabbed dry at 1176 ft, prep to wash with oil. Sun Oil Co.'s Gasper Rodriguez 2, J. C. King sur, dr plugs, set liner, swabbing 2812½ ft. Texas Canadian Oil Corp.'s Mary J. Luby 1, Garza Irrigation Co. sur, drilling in Jackson, top Jackson 4564 ft, depth 4960 ft. E. Renshaw Thomas Est.'s E. V. de Pena 1, Small sec 8, 1 mi s Rosita, ru. Tide Water Asso. Oil Co.'s J. R. Foster 2, J. Poitevent sur, coring shale 2582 ft.

JIM HOGG COUNTY—French Oil Corp.'s M. Vela 1, sur 573, drilling brown shale at 2930 ft.

McMULLEN COUNTY—Alabama Minerals' Margaret Gordon 1, AB&M sur No. 127, drilling 150 ft. Howell Oil Co.'s Kate Martin 1, D. Easter sur No. 213, temp abn at 3510 ft. Edwin M. Jones' Harry Ezzell 6, C. Q. Rag-

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land sur, still sd at 2499 ft. V. G. Schimmell et al's E. R. Hagist 2, R. W. Mills sur, dry and abnd at 2816 ft. E. P. Tinney's Jerry Rutherford 1, Two Rivers Ranch subd, Live Oak School Land sur, drilling 525 ft.

STARR COUNTY — Calderoni-James-Follette's F. Rodriguez 1, por 80, J. of Camargo, sh 56, tested salt water, shut down at 1512 ft. John H. Clopton et al's Dionicio Tijerina 5, sh 14 "C", por 80, tested sw and sd at 1412 ft. Dean Bros.' Miguel Valadez 1, E 2/7, por 84, drilling 1025 ft. Gilcrease Oil Co.'s C. M. DeCastillo 3, sh 7-B, por 77-J, of Camargo, abnd at 822 ft; Kelsey-Bass 1, por 75, J. of Camargo, drilling 1635 ft. K. E. Merren's Starr City Cattle Co. 1-A, Jefferies & Lambeth subd, in por 89, depth 5615 ft, went to salt wtr for sand 5462-79 ft, pb will perf sand 5417-27 ft. Henry Mode et al's Starr Cty. Cattle Co. 1, Jeffries Lambeth subd, por 88, coring 2774 ft. Moss and Heard's S. B. Ricaby 5, por 83, w½ J. of Camargo, coring 1305 ft. Texas Co.'s A. V. Guerra 6-A, sh 305-D, por 67, J. of Mier, acidized with 7000 gals, testing at 3653 ft. Transwestern Oil Corp.'s T. B. Slick School 1, sur 266, drilling 5335 ft.

WEBB COUNTY—Gypsy Oil Co.'s M. G. Martin 2, sur 458, potential 253.25 bud on pump 21.9 gr oil, depth 1927 ft. J. W. Magee's E. Garcia (First Nat'l Bank) 1, Henry James subd, J. V. Borrego gr, drilling 1659 ft. E. J. Pearl et al's D. La Garza Est. 1, sur 262, depth 2097 ft, sand 1981-91 ft, show oil odor and salt water, sand 2085-88 ft, rec 300 ft mud 50 min, dst, coring. Randon Oil Co.'s Joe C. Palmer 1, sur 474, moving in rig. Simon-Grossman & Katz' R. Saldivar 1, sur 657, abnd at 1015 ft.

ZAPATA COUNTY — Fansler-Moore-Murray's Gopher Trust Est. 2, blk 12, sur 6, Fullerton subd, depth 1212 ft, 8⅝ inch casing 22 ft, coring deeper. O. W. Killam's A. M. Bruni Est. 2, E. V. Borrego gr, drilling 700 ft. Ray L. Martin's S. Vela 1, blk 44, sh 2, El Grullo gr, abnd 1501 ft. Eugene Mays et al's Adela G. de Flores 1, Dotty subd, drilling 725 ft.

CORPUS CHRISTI DISTRICT

ARANSAS COUNTY—Barnsdall Oil Co.'s Kate Edwards 1-A, Wm. Lewis sur, A-96, cutting out stuck drill stem at 9785 ft.

BROOKS COUNTY—Mills Bennett Prod. Corp.'s W. W. Jones 1, Guadalupe Sanchez sur, drilling 4247 ft. Standard Oil Co. of Texas' Mestina O&G Co. 1 (lease 2), R. G. Salinas sur, depth 6786 ft, complete, through perfs, est 1M cf gas, ⅜ inch choke, when opened, pressure gauge 250 lbs, when si pres builds up to 790 lbs;. Mestina O&G Co. 8, La Mestina y Gonzalena gr, 3003 ft, flowed clean oil viz artificial device.

COLORADO COUNTY—Coyle-Concord Oil Co.'s South 2, I&GN sur No. 41, dr 4000 ft.

GOLIAD COUNTY—Goliad Oil Co.'s S. E. Cole 1-A, Goliad Town tr, temp abnd at 5687 ft.

HIDALGO COUNTY—Dee Davenport et al's Hidalgo County Water & Improvement District No. 6, sec 95, ru. Felmont Oil Corp .et al's Mayer & Weill 1, tr 1, por 47, depth 4515 ft, shut down orders, contract depth. Dayle L. Smith Oil Co.'s Fairbanks & Young 1, blk 14, por 46, depth 2310 ft, temp abnd.

JACKSON COUNTY—George J. Greer et al's J. R. Davis 1, D. H. Hoffman sur, A-33, junked and abnd at 6991 ft. Texas Company's C. E. Niebuhr 1, O. S. York sur, drilling 4765 ft.

JIM WELLS COUNTY—Roy Gaines et al's W. D. Wade Casa Blanca sur, dry and abnd at 5152 ft. Magnolia Pet. Co. et al's A. A. Seeligson 7, Los Jaboncillos sur, well completely killed by pumping in commercial mud, mi rig to drill deeper.

KARNES COUNTY — Dirks Brothers' E. Ruhmann 2, James Johnson sur, drilling plugg, brkn sand 3586-3620 ft, set 7 inch csg at 3590 ft, depth 3620 ft.

LIVE OAK COUNTY—C. E. Jacobs et al's J. W. Nichols Ranch 1, Simeon Ryan sur, drilling 1050 ft. Petroleum Producers Co.'s Bessie Alexander 1, Luis Ayres sur, lcn. Unit Petroleum Co.'s W. O. Nichols 1, Simon Ryan sur, lcn.

NUECES COUNTY—Camp Prod. Corp.'s C. Phillip Wardner 1-A, Paso Ancho Abajo and Paso Ancho Ariba sur, coring 4710 ft. Seaboard Oil Corp. of Delaware, James P. Luby 2, Canutillo Ditch Col. sur, drilling 2134 ft. Southern Minerals Corp.'s Lucy J. Rivers 1, Bishop subd, Palo Alto gr, encountred several oil shows but abnd at 5903 ft in sdtr hole, depth 6015 ft; Hal G. Yakey 1, King Ranch subd, and in Agua Dulce gr, moved drk off, lcn abnd. United Prod. Corp.'s T. S. Schroeder 1, Andres Fernandez de la Fuentes sur, coring 6107 ft. Sam E. Wilson's J. F. Herold 1, Villareal sur, coring around 5307 ft.

REFUGIO COUNTY—Wynne Drilling Co.'s J. A. Lambert 1, James Power & J. Hewitson surs, drilling 4650 ft.

SAN PATRICIO COUNTY — Buckingham Oil Co.'s Jean Davis 1-A, Peterson subd, depth 7150 ft, test salt water with show oil through perf 7105-8 ft, sd. Danrey Oil Co.'s Jean Davis 1A, Wm. Boyd sur, shut down at 6606 ft, may dr deeper. Plymouth Oil Co.'s J. F. Odem 1-A, Archibald Herron, dr hard lime and shale at 6335 ft. F. P. Schwab's H. A. Smith 1, Juan Hart & Sons gr, mir. Wellington Oil Co.'s James F. Welder 1B, Julian de la Garza gr, dry and abnd at 7090 ft.

VICTORIA COUNTY — Gulf Oil Corp.'s Mahon & Buehler 1, J. Poitevent sur, prep to spud. Magnolia Pet. Co.'s Willie Beck 2, T&NO RR sur, fishing. Stanolind O&G Co.'s Henderson & Pickering 1, E. Benavides sur, drilling at 580 ft.

WILLACY COUNTY—Shell Pet. Corp. et al's Yturria Cattle Co. 2, sh 64, San Juan de Carricitos gr, drilling 4750 ft.

TEXAS GULF COAST

BRAZORIA COUNTY—Jack Frazier's Temple Lbr. Co. 1, e of Bonney, H. & T. B. Sec. 25, dr st sh 2250 ft.
25, dr st sh 2250 ft. Humble's Munson Estate 1, e of East Columbia, S. Carter sur, lcn. Ohio Oil Co.'s Kemper 1, Chocolate Bayou area, H. & T. B. Sec. 33, sw sw at 7355 ft., running sur. Texas Gulf Producing Co.'s Adams 1, Chocolate Bayou area, H. & T. B. No. 40, rep. rig at 6400 ft. Pure's Slade 1, Peach Point area, S. F. Austin sur, td 8337 ft. heav. sh. cutting and pulling dr st stuck at 7963 ft.

CHAMBERS COUNTY—Merit Oil Co.'s Wright 1, Cedar Bayou, Abs. 22, C. Smith sur, 2 mi. w Cotton Lake, lcn.

COLORADO COUNTY — Coyle - Concord's Powell 3-B, Garwood area, I. & G. N. sec. 45, dr 5210 ft., sticky sh.

FT. BEND COUNTY—Research, Inc.'s J. M. Moore 1, ne of Orchard, S. Kennedy sur, sd 5050 ft. W.O.R. Humble's Schulze 1, Needville area, Robt. Hodge sur, mor.

GALVESTON COUNTY — Maco Stewart's No. 1, Hitchcock, chg bits at 4600 ft.

HARDIN COUNTY—Coronado Oil Co.'s Ryan 1, Hathaway area, J. G. Bell sur, ru. Humble's McShane 1, ne cor County, ru.

HARRIS COUNTY—Geo. Anderson et al's Fisher 1, Cedar Bayou area, J. Jams sur, Superior's Butler 1, Bammel area, J. Ehrhardt sur, pb to test Cockfield at 6380 ft., td 10,519 ft. Texas Gulf Prod. Co.'s H. J. Moore 1, Aldine prosp, mim. West Production Co.'s Underwood 1, nw of La Porte, N. Clopper sur, dr shale 8336 ft.

LIBERTY COUNTY—O. C. Garvey's Weaver 1, nw of Cleveland, J. Devers sur, ru. J. G. Mayo et al's Gibbs Brothers 1, ne of Davis Hill, J. D. Martineb sur, dr shale 5308 ft.

MATAGORDA COUNTY—Continental's Hawkins 2, Sheppard Mott area, D. McCarthy sur, mixing mud, td 7216 ft. United North and South's Lambert 1, sw of Buckeye, 7⅝-in. scg cmtd at 8660 ft. wocs.

NEWTON COUNTY—Republic-Houston Oil Co.'s Peavey Moore 1, 10-in. csg at 58 ft. wocs.

WALKER COUNTY—C. W. Markel et al's, Nathan Hale 1, 12 mi w of Huntsville, S. Montgomery sur, lcn.

UTAH

GRAND COUNTY—Cane Creek Oil Co.'s Government 1, nw sw 31-26n-21e, sd as old Frank Shafer well 250 ft from the present lcn, blew out after a si of 10 years.

UTAH COUNTY—Diamond Fork Oil Co.'s 4, s se nw 18-8s-5e, held up with fsg job, td 3990 ft.

WYOMING

ALBANY COUNTY—Ohio Oil Co.'s D. J. Griffin 1, se sw 24-49n-89w, still mim.

BIG HORN COUNTY—Wood-Callahan Oil Co., Ltd.'s Evans-Government 1, ne ne nw 12-49n-91w, pg to 1520 ft and test oil shows.

CARBON COUNTY—Ohio Oil Co.'s Wyoming Oil & Gas Co. 1, se sw 29-27n-89w, still pg to eliminate danger of blowouts.

FREMONT COUNTY—Stanolind Oil & Gas Co.'s Johnson 1, cse se 3-33n-96w, dr water well.

NATRONA COUNTY—General Petroleum Corporation's Government 1, cnw nw se 21-35n-77w, ru.

NIOBRARA COUNTY—W. A. Maupin et al's Berggren 1, nw 23-35n-63w, ru tools.

SWEETWATER COUNTY—Mountain Fuel Supply Co.'s W. L. Williams 1, s ne 5-12n-95w, ru.

WESTON COUNTY—Mush Creek Oil Co.'s Carmone 1, cse sw 31-44n-62w, lcn. John Brorby's 1, sw se nw 26-48n-64w, dr 740 ft.

Ball and Roller Bearings

Bantam Ball Bearings Corporation, South Bend, Indiana, announces availability of Bulletin No. 101, giving a complete list of sizes and types of the firm's enlarged line of ball and roller bearings.

A Valuable Aid In Cementing Operations

The CAVINS Perforation WASHER

A combination of the Up-Trip Device and Pack-Off Shoe (Shown herewith) with The Cavins Automatic Hydraulic Suction Bailer. Easily assembled in 20 minutes.

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Preparing to Cement Through Perforations

This tool not only opens the perforations through which the cement is to be forced, but leaves a clean annular space behind the pipe in which the proper amount of cement may be placed.

After Cementing Through Perforations

In cases where every foot of perforations counts, it may be run immediately after cement has been placed in order to safeguard against the cementing up of more perforations than is desired.

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● Vital to dependable Natural Gas Service are the 21 compressor stations operated by United Gas System at various points in its territory.

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CASING CENTRALIZER
W-K-M Company

W-K-M Company, Houston, Texas, announces the "Cosco" casing centralizer and well bore cleaner, a patented new tool which is designed to protect one of the most important single operations in well completion, the job of cementing.

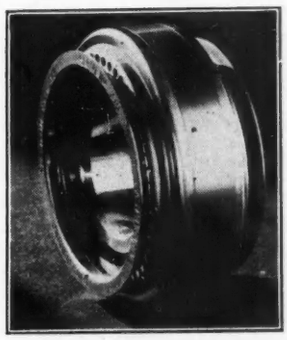
The "Cosco" centralizer, illustrated here, holds the casing in the exact center of the hole and allows an even distribution of cement entirely around the circumference. The tool is equipped with preformed spiral spring steel blades which have an undertwist throughout their curve, this forming a cutting or scraping edge on their upper sides, and a sliding or smoothing edge on the undersides. Upon being raised, the springs scrape the mud lining from the hole wall, permitting cement to bond directly with the formation. On the downward movement, the springs trowel and smooth the hole wall, enabling the operator to preserve the well bore lining at any point. The spiral springs contact the entire circumference of the hole and do not cause irregular surfaces, cuts, or keyseats.

As the fluid passes the cleaner, the combined action of the spirals and the undertwist of the springs cause a whirling effect, which prevents channeling of cement and helps to clean the wall of the hole.

The "Cosco" tool is pulled in and pulled out by means of lugs and slotted collars, the flexibility of the blades allowing it to pass obstructions or through a small area hole.

PRECISION OIL FILM BEARING
The Fast Bearing Company

The Fast Bearing Company, Baltimore, Md., have placed on the market a new Precision Oil Film Bearing which carries the load on a perfect oil film, thereby preventing metal contact, resulting in virtually unlimited life. These bearings embody the hydrodynamic theory of lubrication. Each bearing functions as a self-contained centrifugal force feed pump creating a reliable and efficient lubrication system.



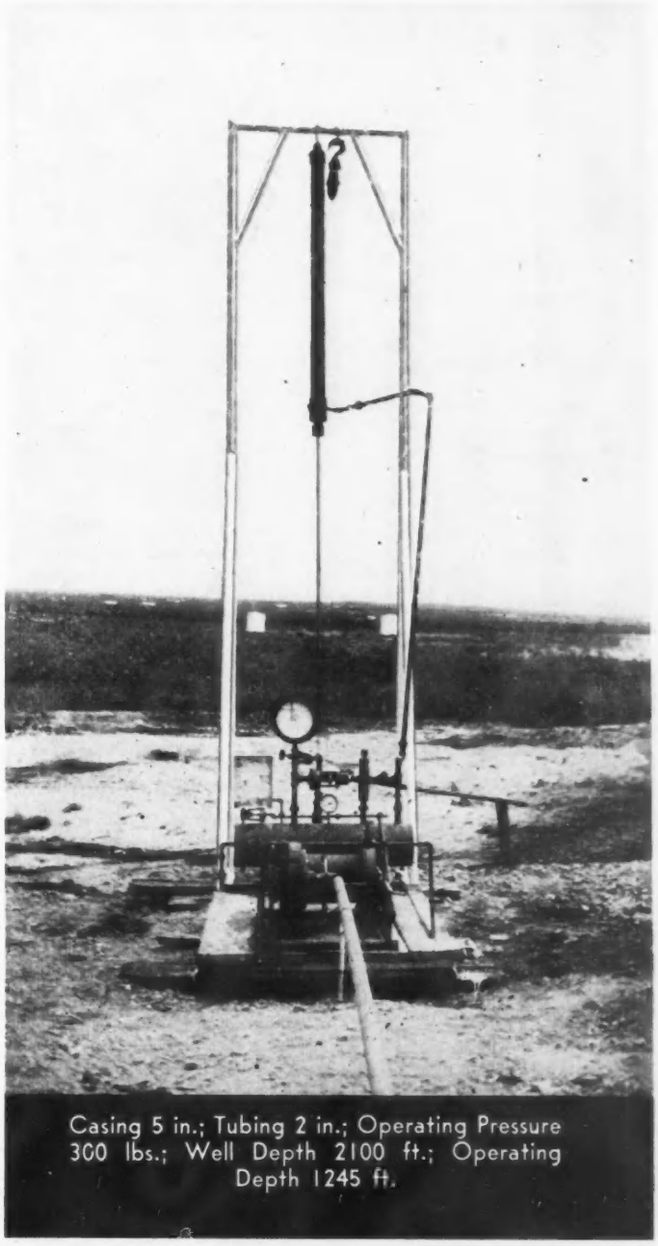
Fast Bearing

The Medium Type 300 Cylindrical Bearings series is designed for radial loads, permitting axial float or expansion of the shaft. The Medium Type 1300 series spherical or self-aligning bearings are for thrust or location bearings to control the lateral position of the shaft as well as to carry the radial load.

SURFACE CONTROL GAS-LIFT
Wilson Supply Company

Wilson Supply Company, Houston, Texas, announces a new automatically operated gas-lifting system, invented by Jeddy Nixon. It consists of a series of valves set at regular intervals in the tubing. Compressed or natural well pressure is introduced in the area between casing and tubing and forces the fluid to the surface when a flow valve is opened. This is accomplished by a rod weight bar suspended by a single strand wire line, controlled from the surface. Flow valves are the ball and seat type. The fluid reaches the surface in a smooth, even flowing stream, it is claimed.

On continuous flowing wells the flow valve is held open by weight bar at all times. On intermittent flowing wells the valve is opened at regular intervals, held open for a definite period, and closed, automatically. This automatic

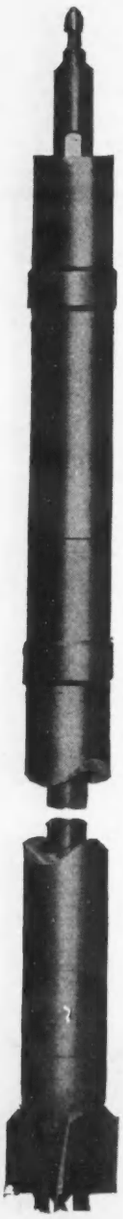


Casing 5 in.; Tubing 2 in.; Operating Pressure 300 lbs.; Well Depth 2100 ft.; Operating Depth 1245 ft.

Wilson Supply Company's surface control gas lift.

operation is accomplished by a specially designed device, built around a 24-hour clock with a 2-hour period of operation. The device is operated entirely by pressure, which may be taken from the well or from a central compressor.

Inasmuch as the location of each valve is known, and the flow is through only the valve opened, the operator knows exactly through which valve the well is flowing.



WIRE LINE RETRACTABLE CORE DRILL AND DRILLING ASSEMBLY

Elliott Core Drilling Company

Elliott Core Drilling Company, 4731 East 52nd Drive, Los Angeles, announces a new development in the Elliott Wire Line Core Drill and Drilling Assembly.

According to the manufacturer, the Elliott Wire Line Core Drill is distinguished by three features, which coordinate to cut faster hole and recover an increased percentage of clean, true cores with a minimum of operating difficulty and expense. The three features are: (1) a novel inner barrel valve, which creates a suction on the inner barrel to aid the entry of unconsolidated cores; (2) improved cutters, which discharge the circulation closer to the bottom of the hole while protecting the core from circulation wash, which results in faster drilling and greater footage before becoming dull; and (3) an inner barrel that requires no driving mechanism and embodies no moving parts.

Savings in time and money are possible because of the elimination of many round trips of the drill pipe, which minimizes wear on the pipe, tool joints, drilling lines, brakes and draw works, as well as protecting the mud on the walls of the hole.

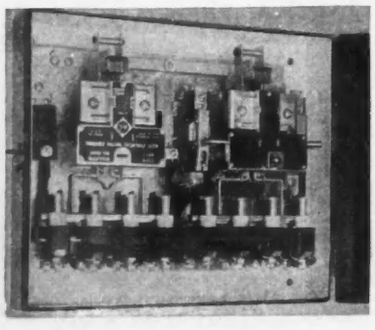
The Elliott wire line retractable core drill and drilling assembly permits coring a specific footage of hole, and it is said to penetrate straight and fast with a high factor of safety, due to the use of a drill collar as an outer barrel. It is possible to core continuously, or intermittently. Inclinations, without loss of time, may be procured by equipping inclinometers with an overshot and spearhead and dropping it into the drill pipe after completing a core. A connection is made with the inner barrel assembly containing the core.

A wide range of standard types of Elliott Wire Line Core Drills are made available by combining one of four drill collar assemblies with one of five different inner barrel assemblies. It may be converted from a core drill to a drilling bit merely by replacing the inner barrel assembly with the drilling assembly, both being interchangeable with the drill collar.

MOTOR STARTER

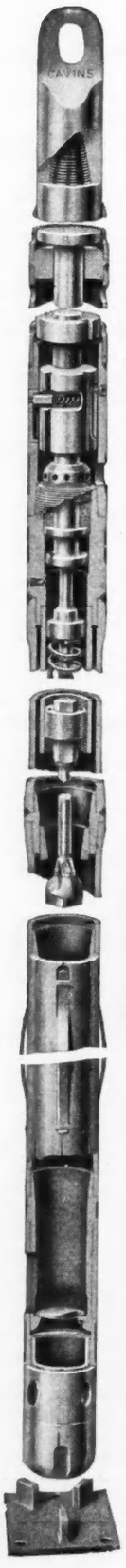
Allis-Chalmers Manufacturing Company

Allis-Chalmers Manufacturing Company Condit Works, Boston, Mass. announces a new reversing motor starter, designated type AP-7-R, furnished for 7½ horsepower, 550 volts, or less. The starter consists of two type AP-7 motor starter units, mechanically interlocked so that either unit cannot be closed if the other is closed. The starter units are equipped with Ruptors. The Ruptors consist of enclosing chambers which confine and depotentiate the arc formed by circuit interruption. They greatly increase the interrupting ability of the contracts and form individual isolating barriers between contacts of opposite polarity.



Allis-Chalmers Motor Starter

Other features are as follows: Large silver double break contacts—long life—no contact dressing needed; solenoid operated, vertical make and break—silent operation; unit construction—pole units consisting of individual molded bases mounted on a steel chassis—true contact alignment; enclosed temperature overload relays affording positive motor protection; under-voltage protection inherently provided.



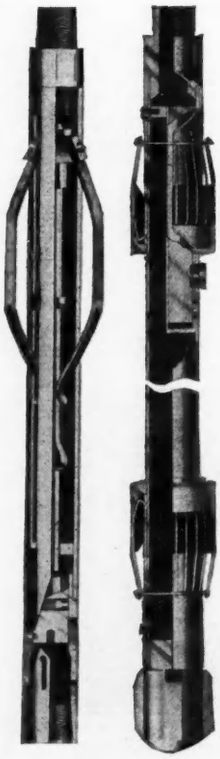
PERFORATION WASHER

The Cavins Company

The Cavins Company, Long Beach, California, has announced the completion of arrangements with its branches and agencies throughout the country for the handling of the Cavins perforation washer.

The washer is made up by combining the pack-off shoe and the up-trip attachment with the Cavins automatic hydraulic suction bailer. The up-trip attachment is assembled to the Cavins bailer near the top. This device makes it possible to load the tool at any desired point in the well simply by raising the entire assembly. The pack-off shoe is assembled to the bottom of the bailer, and restricts the loading of the tool to that point in the perforations which is between the pack-off rubbers.

Utilizing the hydraulic pressure of the fluid column in the well, in the same manner that it is used to load the Cavins bailer, the perforation washer draws sand, mud, shale and other contaminating material from behind the pipe, through the perforations, and into the tool via the pack-off shoe, where it is trapped to be brought to the surface. A certain amount of material which has been loosened, but not recovered in the tool for removal to the surface, will settle to bottom during operations. After washing operations have been completed, it is a simple matter to remove the pack-off shoe and the up-trip and recover this material with the bailer.



The Cavins 3 Tools in 1 Pack-Off Shoe Up-Trip Attachment

The design of this perforation washer enables the operator to run it on the very same type of equipment that he uses to run the regular Cavins automatic hydraulic suction bailer. A built-in fluid bypass permits the tool to be run in easily and withdrawn without lifting a column of fluid ahead of it. The operator may pick out one or more particular spots in his well and work them over to the exclusion of the rest of the perforations, if so desired.

In addition to its use as a means of increasing production, this tool may be used to flush perforations and clean the hole annulus preparatory to cementing. It is also used effectively to eliminate the source of sand bridges.

This Week with the Industry's EQUIPMENT SUPPLIERS

M. E. Nicklin Joins Oil Well Supply Company Organization

M. E. Nicklin, export sales manager, has resigned his position with Waukesha Motor Company to return to the oil industry as assistant to W. C. Ramsey, manager of the machinery division of Oil Well Supply Company, with headquarters at Oil City, Pennsylvania.

Nicklin entered the employ of Waukesha Motor Company nearly 10 years ago as a sales engineer in the oil field division, specializing in the application of multi-cylinder gas and gasoline engines in oil field work. He was soon recognized as an authority in this field and is the author of a treatise, "Something About Gas Lift," which was published in 1928, and distributed widely throughout the industry.

With the reorganization of the export operations, Nicklin became export sales manager in 1936, and in July of that year made an extended European trip to expand and stimulate the market for Waukesha engines in England, France, Germany, Austria, Turkey, Albania, Italy and Greece. More recently he did the same in the South American markets by making a survey throughout South America and Central America, which took him more than 30,000 miles, and into a dozen different countries, most of his journey being made by air. Returning from that trip, he quickly became known as Wisconsin's premier flying salesman, and was in great demand as a speaker at export managers meetings and at luncheon clubs in many different localities.

A native of Pennsylvania, his early field experience prior to becoming export manager for the Waukesha Motor Company was gained in and around the Pennsylvania oil fields. He is a graduate of Penn State in mechanical engineering, is married, and with his wife and son will make his future home at Oil City.

M. E. NICKLIN
Now with Oil Well Supply Company.

Blaine Johnston Becomes Service Firm Executive

Blaine Johnston, former vice president of Sims Oil Company and chairman of the Southwest District of the American Petroleum Institute, has been made vice president and secretary-treasurer of Johnston Oil Field Service Corporation, Houston, with headquarters in the First National Bank Building. Formation and casing testing operations in the Mid-Continent and in Texas and Louisiana Gulf Coasts will be under his direct supervision.

BLAINE JOHNSTON
Vice President Johnston Oil Field Service Company

Blaine Johnson started work as a roustabout in Spindletop field in 1917. For seven years he was general superintendent for White Oil Company, and then stepped up to vice presidency of Sims Oil Company. In 1935 Johnston became vice president of T. J. Drilling Company. His business activities have taken him in every oil producing state in the union except California.

Larkin Packer Company Increases Sales Force

Larkin Packer Company, St. Louis, announces the following additions to its sales organization:

T. R. Wimbish of Corpus Christi, who will work the Corpus Christi and Southwest Texas areas; T. E. Alexander, who will make his headquarters in San Antonio, and work the surrounding territory; and Jack Brown, to handle the New Mexico and extreme West Texas territories.

In addition, W. G. Baumann, formerly of the St. Louis office, has been appointed to assist H. S. Lindenmuth in Kansas. Baumann will make his headquarters in Great Bend, and will cover the adjoining territory, while Lindenmuth will reside in Wichita, and devote his attention to the fields in that locality.

Watt Taylor Joins Brown Hovis Supply Company

W. A. Taylor, district warehouseman for Humble Oil & Refining Company at Wink, McCamey and Andrew for the past 10 years, has resigned to join Brown Hovis Supply Company as district manager for West Texas and New Mexico, with headquarters at Midland, Texas.

Max Hofmann Export Manager For Waukesha Motor Company

Max Hofmann has been appointed export sales manager for Waukesha Motor Company, Waukesha, Wisconsin. He succeeds M. E. Nicklin, resigned.

An engineer of considerable experience, Hofmann joined Waukesha Motor Company in 1926, coming from the Argentine branch of Korting Brothers, German Diesel engine building firm. His work there as a Diesel installation engineer, his subsequent journeys throughout Europe, Africa, and both Americas, and his ability to speak four languages fluently make him well qualified for his new position.

With Waukesha, Hofmann's first activity was in connection with oil engine development. His thorough engineering schooling in Germany and his intimate practical knowledge of Diesels and other oil-burning engines made him a valuable member of the engineering staff. He was in much demand as a speaker and presented nu-

MAX HOFMANN
Appointed export manager for Waukesha.

Hits in The Pinches

The pinch-hitter who goes in with the score against him and the bases loaded is called on to "pull the game out of the fire."

When you get a rod break the mounting "score" of lost production time makes quick action imperative. In the emergency an O'Bannon socket will prove its dependability.

Whether you are fishing for a rod or box, for soft or hardened couplings, the O'Bannon socket selected for the job will "come through" with a quick, sure catch.

O'Bannon dependability is evidenced by expressions from production men such as that of Mr. Walter Kinch. Production Superintendent, East Santa Fe Oil Co., Santa Fe Springs, Calif. Mr. Kinch recently remarked, "I am particularly pleased with the service I get from O'Bannon sockets and have never failed to make my catch when I used one of them."

EXAMINE AN O'BANNON SOCKET at your SUPPLY STORE

Walter O'Bannon Company
Tulsa, Oklahoma

O'BANNON
SUCKER ROD
SOCKETS

merous papers on Diesel engines, and related subjects before both the A.S.M.E. and the S.A.E., not a few of which have been published by the important engineering trade papers.

During the last few years, with export business becoming more and more important, Hofmann has devoted much of his time to Waukesha's activity in this field. His engineering training has been applied to foreign sales and installation problems, and he has made a number of visits to Latin America in this capacity.

Change Name of Ideal Bailer to Midco

R. T. Lamb, H. T. Swortwood and W. A. Larson announce the change of the name of their company from Ideal Bailer Company to Midco Bailer Company. The company is located at 1006 SE 29th Street, Oklahoma City, Oklahoma.

General Power Company to Handle Pioneer Light Units

General Power Company, Quapaw, Oklahoma, announces the distributorship for the Pioneer Gen-E-Motor Corporation line of Gas-O-Lectric power plants. These units being small in size, are designed for oil field use on drilling rigs, camps, and work that requires portable flood lighting, and power stations.

Pacific Pump Works Moves Into New Plant

On August 1 the new administration and factory buildings of Pacific Pump Works at Huntington Park, California, were officially opened and occupied. The new buildings are directly across the street from the old plant which will still be used to handle the increased business of this rapidly growing concern.

The offices in the administration building embody the most modern design, finish and furnishings. Sound deadening, air conditioning, etc., have all gone to make this structure one of the most up-to-date executive headquarters in the oil equipment industry.

The new factory buildings are of the conventional saw-tooth construction, scientifically lighted, heated and ventilated. New equipment has been moved in which will enable plant production to be stepped up to keep pace with sales.

O. H. Attridge Appointed to Important A.P.I. Committee

O. H. Attridge of Tulsa, chief engineer for Lucey Products, Inc., has been appointed to serve on the manufacturer's sub-committee of the rotary drilling equipment committee of the American Petroleum Institute.

Attridge will serve as alternate for W. S. Evans, New York, president of Lucey Export Corporation.

New Steel Foundry Begins Operation at Houston

Electric Alloy Foundry Company, Inc., has recently completed its plant and has begun operations at 3001 Navigation Boulevard, Houston, Texas.

The new concern will specialize in the production of small electric furnace castings in stainless steel, special alloy steels and irons, heat-resistant types of steel. The plant is under the direction of J. V. Reich, who has had a broad experience in alloy foundry practice.

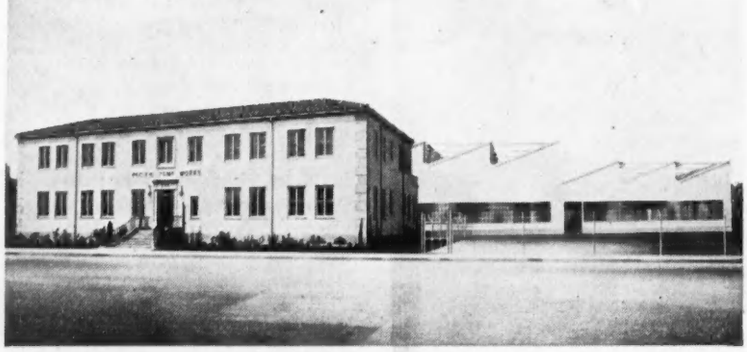
Osage Metal Company Appoints New Representatives

V. B. Likins, president and general manager of Osage Metal Company, Inc., Oklahoma City, Oklahoma, has just returned from an extended trip to New York City and announces the appointment of The Petroleum Machinery Corporation, 30 Rockefeller Plaza, New York, N. Y., as export agents for the complete line of Osage hard surfacing metals.

Likins also announces the appointment of another distributor: Electrodos, S. A., Monterey, N. L. Mexico, as Mexican agents. This distributor has five offices in different parts of Mexico and will handle the complete line of Osage metals.

New Republic Steel Corporation Distributors

Four new distributors for tubular products have been announced by N. J. Clarke, vice president in charge of sales of Republic Steel Corporation, Cleveland, Ohio. They are: The Bluefield Supply Company, Bluefield, West Virginia; Ormand Plumbing Supply Company San Antonio, Texas; J. Gaber Company, Houston, Texas, and Morgan's, Inc., Savannah, Georgia. The complete range of tubular products, including steel merchant pipe and Toncan iron pipe, will be distributed by these firms.



New Plant of Pacific's Pump Works at Huntington Park, California

Squeaks from the Bull Wheel

Quick

Next to a famous astronomer at a dinner party, the sweet co-ed struck up a conversation with him by asking, "What do you do in life?"

"I study astronomy."

"Dear me," said she, "I finished astronomy last year."

Mistakes

When a plumber makes a mistake he charges double for it.

When a lawyer makes a mistake it means more business.

When a doctor makes a mistake, he buries it.

When a judge makes a mistake it becomes the law.

When a preacher makes a mistake, nobody knows the difference.

But when an editor makes a mistake, good night!

No Runs, No Hits, One Error

He brushed his teeth twice a day with a nationally advertised tooth brush.

The doctor examined him twice a year.

He wore rubbers when it rained.

He slept with the windows open.

He stuck to a diet with plenty of fresh vegetables.

He relinquished his tonsils and traded in several worn-out glands.

He golfed, but never more than 18 holes.

He never smoked, drank, nor lost his temper.

He did his daily-dozen daily.

He got at least eight hours sleep each night.

His funeral will be held next Wednesday.

He is survived by 18 specialists, 4 health institutes, 6 gymnasiums and numerous manufacturers of health food and antiseptics.

He had forgotten about trains at grade crossings.

E Pluribus Unum

Doctor: "Your husband must have absolute quiet. Here is a sleeping draught."

Wife: "And when do I give it to him?"

"You don't give it to him—you take it yourself."

Hush, Willie

"Pop, you took a day off today, didn't you?"

"Yes, son. How did you know?"

"You smell so of golf."

Page Ananias!

"It was so cold where we were," said the Arctic explorer, "that the candle froze and we couldn't blow it out."

"That's nothing," said his rival. "Where we were the words came out of our mouths in pieces of ice, and we had to fry them to hear what we were talking about."

Home Product

Him: "Well, I suppose you're plenty angry because I came home with this black eye last night."

Her (sweetly): "Not at all, dear. You may not remember it, but when you came home you didn't have that black eye."

Kentucky Feuds

Man born in the wilds of Kentucky is of *"feud"* days, and easy virtues. He fisheth, fiddleth, cusseth and fighteth all the days of his life. He shunneth water as a mad dog, and drinketh much moonshine. When he desireth to raise Hades, he planteth a neighbor, and Lo! he reapeth an hundredfold.

He goeth forth in gladness, and cometh back in fragments.

He riseth in the night to let the cat out, and behold it taketh nine doctors three days, or one doctor twenty-seven days, to pick the buckshot from his person.

He calleth his neighbor a liar, and getteth himself filled with scrap-iron, even to the fourth generation.

A cyclone bloweth him into the bosom of his neighbor's wife, and his neighbor's wife's husband bloweth him into the bosom of Father Abraham before he has time to explain.

He raiseth even from the cradle to seek the scalp of his grandsire's enemy, and bringeth home in his carcass the ammunition of his neighbor's wife's cousin's father-in-law, who avengeth the deed.

He goeth forth on his journey half-shot, and cometh back on a shutter shot.

Yea, verily, his life is uncertain, and he knoweth not the hour he may be jerked hence. SELAH!

Takes the Blame

For hours Peter Mild had paced back and forth in the corridor of the maternity hospital; but at last, all in, he sat down on a chair and fell fast asleep. A nurse, hastening by, dropped a pan with a terrific clatter, and quickly scooping it up, sped out of sight. At the same moment a door opened, and a nurse emerged, holding a bouncing baby up for the startled Peter's inspection.

Simultaneously, a door on the opposite side of the corridor was thrown open and an angry doctor glared out to see what had caused that infernal clatter.

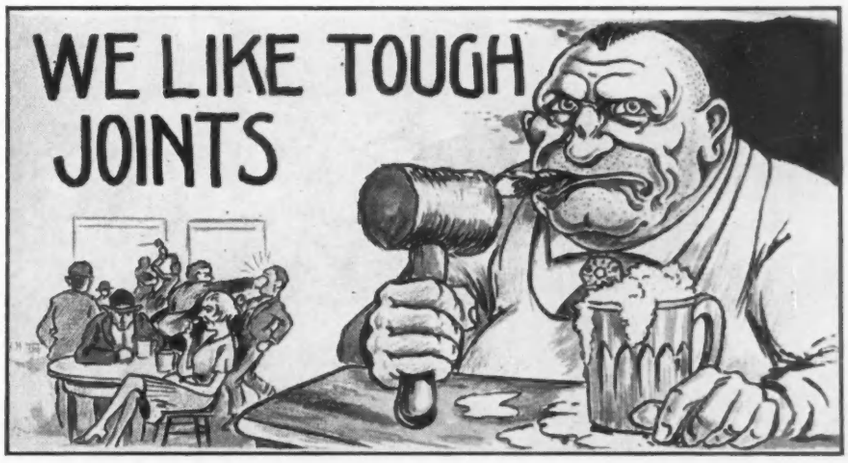
"WHO did that?" hissed the doctor.

"W-hy," stammered the only-partly-awake Peter, still gaping at his first-born, "I understand that I did!"

All Suffer

Mrs. Jones says she thinks she'll have to have another operation.

I hope not; I suffered terribly last time.



—that's where we make a lot of

FRIENDS

!

UNIBOLT Steel Couplings give you a perfect seal on the toughest connections. They are much easier to install in close, inaccessible places because of compact design, small size and light weight compared to conventional connecting devices, and because of time and labor saving. And, on problems of misalignment . . . the medium pressure Malleab'e UNIBOLT allows 5 degrees of misalignment.

Note, in the 6,000 lb. test UNIBOLT at right, the compact design compared to the average bulky union.

THORNHILL CRAVER CO.

Houston UNIBOLT **Texas**

INDEX TO ADVERTISERS

	Page
J. S. Abercrombie Co.	89
Abercrombie Pump Co.	23
Acme Fishing Tool Co.	—
Alamo National Bank	118
Alling Blue Print Co.	110
The Louis Allis Co.	—
Allis-Chalmers Manufacturing Co.	—
Ajax Iron Works	53
Allen & Morris	78
Allsteel Products Manufacturing Co.	—
The Aluminum Company of America	—
American Askania Corporation	—
American Assn. of Petroleum Geologists	—
American Cable Co.	Second Cover
American Cast Iron Pipe Co.	—
American Hammered Piston Ring Division of Koppers Co.	—
American Industrial Peace Assn.	—
American Iron & Machine Co.	—
American Locomotive Co.	—
American Meter Co.	10
American Roller Bearing Co.	65
American Sand-Banum Co.	—
American Seismograph Co.	—
American Steel & Wire Co.	—
Frank Anderson	—
Atlas Ball Co.	—
Atlas Powder Co.	—
Atlas Supply Co.	—
Axelson Manufacturing Co.	—
Baash-Ross Tool Co.	84-85
Baker Oil Tools, Inc.	—
Baldwin-Duckworth Chain Corp.	—
Barber-Green Co.	—
Baroid Sales Co.	143
The Barrett Co.	—
William M. Barret, Inc.	194
Bartlett-Hayward Division of Koppers Co.	—
Beaumont Iron Works Co.	107
Black, Sivalls & Bryson	—
Bradford Motor Works	—
Braniff Airways	—
The Brance-Krachy Co.	—
The Brewster Co.	178
The Bridgeport Machine Co.	142, 146, 166
Broderick & Bascom Rope Co.	57
Al Buchanan Drilling Co.	86
Buckeye Traction Ditcher Co.	126
The Buda Company	—
Bull-Stewart Equipment Co.	—
Butler Manufacturing Co.	—
A. M. Byers Co.	—
Byron Jackson Co.	—
Jo H. Cable	194
Calmec Manufacturing Co.	—
Cameron Iron Works	76-77
Carnegie-Illinois Steel Corp.	—
Carson Machine & Supply Co.	—
Raymond S. Carter	194
The Cavins Co.	195
Central Power & Light Co.	91
Chain Belt Co.	61
The Chemical Process Co.	—
Chiksan Oil Tool Co.	—
Clark Bros. Co.	—
Clayton Manufacturing Co.	—
The Cleveland Trencher Co.	—
Climax Molybdenum Co.	—
Columbian Steel Tank Co.	15
Continental Oil Co.	—
The Continental Supply Co.	75
Fred E. Cooper Co.	—
The Cooper-Bessemer Corp.	42-43
Corpus Christi Chamber of Commerce	116
Joe W. Cosner	132
Crane Co.	14
Crude Oil Terminal Co.	87
Cummins Engine Co.	—
W. H. Curtin & Co.	192
Darling Valve & Manufacturing Co.	150
The Dayton Rubber Mfg. Co.	159
Derrick Rental & Construction Corp.	—
Diamond Chain Manufacturing Co.	191
Dixon Valve & Coupling Co.	—
Dodge Manufacturing Co.	—
David Donoghue	194
Dowell Incorporated	20
E. I. du Pont de Nemours & Co.	—
Eastman Oil Well Survey Co. of Texas	—
Economy Electric Lantern Co.	—
Elliott Core Drilling Co.	155
Emsco Derrick & Equipment Co.	83
Engineering Laboratories, Inc.	—
Eureka Tool Co.	—
The Fafnir Bearing Co.	—
George E. Failing Supply Co.	171
First National Bank in Dallas	—
First National Bank, Houston	—
First National Bank & Trust Co. of Tulsa	—
Edwin H. Fitler Co.	—
Fluid Packed Pump Company	—
Foote Bros. Gear & Machine Corp.	—
Fort Worth Clearing House Assn.	—
The Fort Worth Laboratories	194
Four Wheel Drive Auto Co.	—
The Fox Rig & Lumber Co.	—
Franks Manufacturing Corp.	12
Frick-Reid Supply Corp.	13
Frost National Bank	71
Gardner-Denver Co.	—
The Garlock Packing Co.	—
Garrott Brass & Machine Co.	—
Gas Lift Corp.	—
Gaso Pump & Burner Manufacturing Co.	117
Gearench Manufacturing Co.	—
General Electric Co.	—
Geological Scientific Service Co.	194
Geophysical Service, Inc.	111
Globe Oil Tools Co.	—
Goodall Semi-Metallic Hose & Manufacturing Co.	115
The B. F. Goodrich Co.	—
Goodyear Tire & Rubber Co.	79
H. P. Gott Manufacturing Co.	193
Gray-Kerotest	—
Gray Tool Co.	—
Greenhead Bit & Supply Co.	—
Guardian Loan & Trustee Co.	177
The Guiberson Corp.	8
Gulf Coast Machine & Supply Co.	103
Gulf Envelope Co.	—
Gulf Publishing Co.	—
Gulf States Utilities	179
Gustin-Bacon Co.	—
Halliburton Oil Well Cementing Co.	First Cover
Hardway & Cathey	194
Harrisburg Steel Corp.	—
Harnischfeger Corp.	19
Haynes Stellite Co.	145
Hazard Wire Rope Co.	—
C. M. Heeter Sons & Co.	—
Hercules Tool Co.	—
Hewitt Rubber Corp.	—
Hinderliter Tool Co.	131
Hoard Exploration Co.	—
Hooks Exploration Co.	194
Hopper Machine Works	—
The Chas. N. Hough Manufacturing Co.	—
Houston Lighting & Power Co.	—
Houston Ready-Cut House Co.	173
Howell Machine Shop	94
Hughes Tool Co., Fourth Cover & Insert,	66-67
Humble Oil & Refining Co.	—
Hunt Tool Co.	176
Hyatt Bearings Division	—
Hydril Co.	—
Independent Exploration Co.	129
The Inferno Co.	180
Ingersoll-Rand Co.	—
International Derrick & Equipment Co.	109
International Harvester Co.	41
The International Nickel Co.	—
International Supply Co.	—
Byron Jackson Co.	—
Jarecki Manufacturing Co.	49
W. P. Jenny	194
Jensen Brothers Manufacturing Co.	—
Johns-Manville	—
Johnston Oil Field Service Corp.	—
M. O. Johnston Oil Field Service Corp.	—
Edwin M. Jones	95
The S. M. Jones Co.	—
Jones & Laughlin Steel Corp.	—
J. & S. Carburetor Co.	—
Hotel Kansas Citian	—
The Kennedy Valve Manufacturing Co.	22
Kerotest Manufacturing Co.	—
Kibele Manufacturing Co.	181
Koppers Co.	—
Landis Machine Co.	—
The Lane-Wells Co.	141
Larkin Packer Co.	Third Cover
The Layne & Bowier Co.	163
Lenox Hotel	—
A. Leschen & Sons Rope Co.	17
The Lincoln Electric Co.	68
Link Belt Co.	11 and 189
Lone Star Cement Corp.	47
Lord Baltimore Hotel	—
Lucey Boiler & Manufacturing Corp.	167
Neal Lucey Co.	194
Ludlow Valve Manufacturing Co.	—
Lufkin Foundry & Machine Co.	59
Lycoming Manufacturing Co.	149
MacClatchie Manufacturing Co.	—
McAlpin Hotel	—
McCullough Tool Co.	—
Maintenance Engineering Corp.	22
D. S. Mair Machinery Corp.	184
Maloney Tank Manufacturing Co.	—
Manhattan Rubber Division	—
F. G. Masquelette & Co.	—
Martin-Decker Corp.	—
Mayes Brothers, Inc.	—
McIntosh & Seymour Corp.	—
The Medart Co.	7
Merco Nordstrom Valve Co.	Insert, 98-99
Metric Metal Works	10
Midco Bailer Co.	—
Milam Drilling Co.	126
Miller Sand Pump Co.	—
Mission Manufacturing Co.	3
Lee C. Moore & Co.	—
Muskogee Iron Works	—
National Bank of Tulsa	157
The National Supply Co. of Delaware	45
National Tank Co.	—
National Tube Co.	—
Naylor Pipe Co.	—
Nueces County, Navigation Commission	73
The New Deal Specialty Co.	186
New Weston Hotel	—
Norma-Hoffmann Bearings Corp.	—
Norvell-Wilder Supply Co.	54-55
Walter O'Bannon Co.	200
O.C.S. Manufacturing Co.	—
Oil Center Tool Co.	93
Oil City Brass Works	—
Oil Well Supply Co.	—
Oil-World Exposition, Inc.	119
O. K. Machine & Manufacturing Co.	—
Oklahoma Portland Cement Co.	—
Osage Metal Co.	182
Otis Pressure Control	—
Pacific Pump Works	—
The Parkersburg Rig & Reel Co.	24
Patterson-Ballagh Corp.	—
Pelican Well Tool & Supply Co.	183
B. E. Perkins	—
Petroleum Electric Power Club	—
Petroleum Rectifying Co. of California	—
Petty Geophysical Engineering Co.	97
Phoenix Refining Co.	124
The Pierce Governor Co.	88
Pittsburgh Equitable Meter Co.	Insert, 98-99
Pittsburgh Steel Co.	—
Plowden Supply Co.	81
Portable Rig Co.	—
Preformed Wire Rope	—
Reading-Pratt & Cady Co.	—
Rector Well Equipment Co.	—
Reed Roller Bit Co.	50-51
Porter Regenold	130
Joseph Reid Gas Engine Co.	—
The Republic Rubber Co.	9
Republic Steel Corp.	—
Rice Hotel	88
R-F Electric Co.	—
Rieber Laboratories	—
The Ridge Tool Co.	—
Rollway Bearing Co.	125
Dewey T. Ross Engineering Corp.	—
Royal Manufacturing Co.	—
Ryder Scott Co.	—
San Antonio Machine & Supply Co.	177
San Jacinto Inn	194
Jack A. Schley	194
Schlumberger Well Surveying Corp.	127
Second National Bank	—
Seismic Explorations, Inc.	105
Shaffer Specialty Co.	—
Shaffer Tool Works	—
Shell	—
Sinclair Refining Co.	—
SKF Industries, Inc.	4
A. O. Smith Corp.	—
E. M. Smith Co.	172
Howard Smith Co.	—
Nowery J. Smith Supply Co.	—
South Chester Tube Co.	6
Southern Engine & Pump Co.	190
Southern Minerals Corp.	70
Southern Pacific Lines	185
Southwestern Gas & Electric Co.	—
Spang & Co.	174
Spang, Chalfant & Co.	5
Sperry-Sun Well Surveying Co.	16
Stanley Tools	—
Star Drilling Machine Co.	—
A. J. Stephens Co.	—
Stevens Hotel	—
Sullivan Machinery Co.	—
The Sullivan Co.	—
Templeton, Kenly & Co.	—
Texaco Development Corp.	—
Texas Electric Service Co.	—
Texas Electric Steel Casting Co.	63
Texas Iron Works	—
Texas Rubber & Specialty Co.	—
Texas Steel Co.	—
Thermoid Rubber Co.	175
Thornhill-Craver Co.	201
Thornton Tandem Co.	—
The Timken Roller Bearing Co.	—
Titusville Iron Works	—
Tnemec Co.	—
Edgar Tobin Aerial Surveys	164
Tretolite Co.	—
Trimont Manufacturing Co.	—
Trinity Portland Cement Co.	—
Twin-Seat Valve Co.	—
Union Carbide & Carbon Corp.	145
Union Wire Rope Co.	—
United Gas System	196
United States Heat Treating Co.	133-135-137
United States Rubber Co.	—
United States Steel Corp.	—
United Supply & Manufacturing Co.	—
Universal Atlas Cement Co.	—
Wailes Dove-Hermiston Corp.	158
The Watson-Stillman Co.	—
Waukesha Motor Co.	—
Wellington Oil Co.	92
Western Block Co.	114
Western Pneumatic Co.	102
Westinghouse Electric & Mfg. Co.	100-101
Wheeling Steel Corp.	18
The Wheland Co.	121
O. C. Whitaker, Inc.	—
Wickwire Spencer Steel Co.	123
J. H. Williams & Co.	90
Williams Brothers, Inc.	—
Williamsport Wire Rope Co.	—
K. R. Wilson	124
Wilson-Snyder Manufacturing Co.	—
Wilson Manufacturing Co.	—
Wilson Supply Co.	113
W-K-M Co.	139
The Wood Shovel & Tool Co.	—
Worthington Pump & Machinery Corp.	—
Yale & Towne Manufacturing Co.	—
Young Engine Corp.	—
Young Radiator Corp.	—
Youngstown Sheet & Tube Co.	165

The OIL WEEKLY
OIL and GAS ENGINEERING
INTERNATIONAL AUTHORITY FOR THE PRODUCING AND PIPE LINE INDUSTRY
THE WEEK'S NEWS INTERPRETED

THEY PROTECT YOUR TUBING and INCREASE PUMP EFFICIENCY

Today you do not need to "trust to luck" and risk the danger of a dropped or parted string of tubing. BJ Tubing Catchers set instantly in the event of an accident, and the extra-large slips stop the tubing safely, without damage to the casing. At all times while running-in, coming-out, or when suspended in the well, you have complete protection.

By adding a BJ ANCHOR and setting the catcher, vertical movement of the tubing while pumping is eliminated. Wear on couplings and casing is avoided — the number of pulling jobs is reduced — and the stationary, anchored pump by taking a full stroke develops its full efficiency, limited only by the amount of oil that is available.

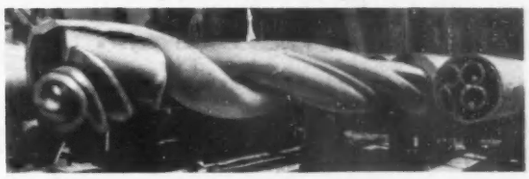
TWO TYPES MEET EVERY NEED

BJ SHORTYPE "C" CATCHERS offer ample tubing protection in wells of average depth. Their low cost makes it economically possible to safeguard even the shallowest well. BJ SURESTOP TUBING CATCHERS (with or without anchor shown at left) are safe for the longest, heaviest strings of tubing.

Complete details are given on pages 390 to 393 of the 1937 Composite Catalog, or write the office nearest you for the BJ Catalog.

BYRON JACKSON CO.
FORT WORTH • LOS ANGELES • NEW YORK

THE SENTINEL OF SAFETY Prevents *Accidents Like These*



BJ TUBING *Catchers*

your SUPPLY STORE HAS THEM, OR CAN GET THEM *QUICKLY*

STREAMLINING reduces EXTERNAL resistance

BUY ACCO QUALITY

A FEW OF THE 137 AMERICAN CHAIN & CABLE INDUSTRIAL PRODUCTS

AMERICAN CHAIN DIVISION
(DOMINION CHAIN COMPANY, Ltd., in Canada)
Weed Tire Chains • Welded and Weldless Chain • Malleable Castings • Railroad Specialties

AMERICAN CABLE DIVISION
Tru-Lay Preformed Wire Rope • Tru-Loc Processed Fittings • Crescent Brand Wire Rope Tru-Stop Brakes

ANDREW C. CAMPBELL DIVISION
Abrasive Cutting Machines • Floformers Special Machinery • Nibbling Machines

FORD CHAIN BLOCK DIVISION
Chain Hoists • Trolleys

HIGHLAND IRON & STEEL DIVISION
Wrought Iron Bars and Shapes

MANLEY MANUFACTURING DIVISION
Automotive Service Station Equipment

OWEN SILENT SPRING COMPANY, Inc.
Owen Cushion and Mattress Spring Centers

PAGE STEEL AND WIRE DIVISION
Page Fence • Wire and Rod Products Traffic Tape • Welding Wire

READING-PRATT & CADY DIVISION
Valves • Electric Steel Fittings

READING STEEL CASTING DIVISION
Electric Steel Castings, Rough or Machined

WRIGHT MANUFACTURING DIVISION
Chain Hoists • Electric Hoists and Cranes

PREFORMING reduces INTERNAL resistance...

● Streamlining tends to eliminate the power-consuming resistance of external forces against airplanes, automobiles or trains. Preforming tends to eliminate the life-shortening internal stresses from within wire lines.

Being free of internal stress TRU-LAY Preformed lines are easy to handle. TRU-LAY resists kinking, requires no seizing when cut or broken. TRU-LAY Preformed resists rotating or twisting in sheave grooves, spools perfectly on the drum, resists whipping. For all these reasons TRU-LAY lasts longer—gives much greater dollar value.

AMERICAN CABLE DIVISION
AMERICAN CHAIN & CABLE COMPANY, Inc.
WILKES-BARRE, PENNSYLVANIA

Branches or Distributors in All Oil Field Centers

In Business for Your Safety

GREEN SIGNIFIES SAFETY

TRU-LAY *Preformed* ROTARY LINES

ALL AMERICAN CABLE DIVISION ROPES MADE OF IMPROVED PLOW STEEL ARE IDENTIFIED BY THE EMERALD STRAND